THE

Journal of the American Medical Association.

EDITED FOR THE ASSOCIATION BY N. S. DAVIS.

PUBLISHED WEEKLY.

Vol. VII. CHICAGO, OCTOBER 30, 1886. No. 18.

ORIGINAL ARTICLES.

HEALTH INSURANCE, OR OUR FINANCIAL RELATION TO THE PUBLIC.[1]

BY WOODS HUTCHINSON, A.M,. M.D.,

LECTURER ON HYGIENE, IOWA COLLEGE OF PHYSICIANS AND SURGEONS, DES MOINES, IOWA.

If I were to put the question to this august representative assembly, "What is the most annoying and unpleasant feature of our professional work, from what source spring our most harassing, though comparatively petty cares and our most provoking disappointments?" I think I should have no difficulty in determining even if all spoke at once, that what we may call the financial question in medicine, enjoyed that "bad eminence" more generally than any other which could be suggested. No doubt much of this difficulty and unpleasantness is inherent in the very nature of the process; for this is the point of metamorphosis at which our talent and industry must be coined into their equivalent of hard cash, where our lofty ambitions, noble aims or Utopian schemes for benefiting the race, come into merciless contact with the hard, cold realities of life and the struggle for existence, always at best a mortifying experience. Friction at this point is inevitable, a reduction to a minimum is all we can hope to effect. Whether the financial relations which we sustain to the laity are the best possible which could be assumed to effect this reduction, is the question to which I wish briefly to call your attention to-day. I stand here simply as an animated interrogation point.

No doubt the question has suggested itself to many of you that the treatment of this subject would have been much more appropriately undertaken by one of wider experience and longer standing in the profession, but it is the peculiar privilege of youth and inexperience to ask the *raison d'etre*, even of truths which we have come to regard as axiomatic and customs which have grown hoary with centuries of observance. Is the system of remuneration only for services rendered, in fact of making a physician's income from a family or community depend solely upon the amount of sickness occurring in it, the best that can be devised for the mutual interests of both parties concerned? Such practically is our system. Its philosophy might be condensed in the motto "Millions for Cure, but not one cent for Prevention." The astute Chinese who were discussing civil service reform when our ancestors were building the reed hut and hurling the flint-tipped javelin, are said to pay their medical attendants regularly as long as they enjoy good health, but to promptly discontinue their remittances on the first appearance of sickness, to resume only on recovery; which no doubt has arisen from their absurdly attempting to live up to a foolish old proverb of ours about "an ounce of prevention."

It seems to me that the weakness of our system lies in this one fact, that it gives us such an exceedingly limited opportunity for what has been well called the practice of preventive medicine. No one thinks of consulting us until they at least "feel unwell," and in many instances not until days, or even weeks of precious time have been wasted or worse, in trying to "wear the trouble off," or in blindly applying every crude remedy which household experience, patent quackery or superstition can suggest; all because they are "not sick enough to call a doctor," in other words don't feel uncomfortable enough to be willing to pay more than the price of a bottle of patent medicine for relief. To such an extent has this habit of delaying been carried, that we often find patients hesitating to call us in just because they are unwilling to admit even to themselves that they are "so seriously ill" as to need our services. In fact the abominable phrase "sick enough to need a doctor" has become almost the popular synonym for, at best, a serious indisposition and often a well developed stage of a possibly fatal disease. The phrase and the feeling that it represents ought to be obliterated from the speech and thought of every civilized community. Through its influence, we are brought face to face with the legitimate result of months or even years of violation of the laws of our being aggravated by days of neglect or maltreatment, and confidently expected to avert the vengeance of outraged nature and undo the work of years, in days or weeks. "If I had only been called sooner" is a sadly familiar phrase in our professional vocabulary. To thus stem or even reverse the current of nature, we are driven to use the most powerful agents, many of them deadly poisons, to call "halt!" in tones which will compel the attention of the most obstinate morbid process and every few decades, a not wholly unnatural wave of popular indignation sweeps over the community, not against itself for living so as to render such drugs indispensable, but against physicians, forsooth, for prescribing them. It was on the crest of such ever recurring waves that the Hahnemanian, Thompsonian, Botan-

[1] Read in the Section on Public Health at the Thirty-Seventh Annual Meeting of the American Medical Association.

ical, Hydropathic and Faith-cure manias successively came into popular favor. Thus the mutual confidence and sympathy which should exist between the profession, and the public is seriously impaired and the interests of both suffer in consequence. Would not a system of constant medical attendance, remunerated alike in sickness and in health, enabling us to give advice or treatment just when we see it is needed, even if unasked, and rendering professional counsel, not only in disease but in health, the first thought, the easiest and most natural thing, the rule instead of the exception; would not such a scheme as this, if practicable, most happily modify the condition of affairs and prove a long step toward securing the health and happiness of the race?

But supposing ourselves installed in full charge of a case, are we even then freed from the perplexities of our financial system? Scarcely even then. How often are we annoyed in the very midst of a serious case, when every shadow of change must be instantly noted and promptly met, by the remark of the family, friends, or even of the patient, that they "can't afford to have us come so often." This fortunately is not a very common experience, but all of us can testify that when it does occur it is, to say the least, exceedingly disheartening. When, however, we reach the period of convalescence, another head of the hydra springs up to confront us: "Really, doctor, I feel so much better this morning that I don't think you need call again until I send for you," is the remark of our wan-lipped and languid patient, blissfully ignorant of the hundred and one pitfalls which yet lie between him and health, and we can but submit to his decision or run the risk of being thought anxious to make all we can out of the case and possibly of having our bill for subsequent services protested. How often are we called in hot haste only to find our patient beyond help, or if we escape this, how frequently does the convalescent, dissatisfied with the slow and uncertain progress he is making, conclude with charming consistency that it is the fault of our treatment, "too much strong medicine" perhaps, and resort to some rival physician, quack or vender of patent medicines, to whom he ascribes all the credit of the cure. These results are patent to the most unskilled eye, but what a prophecy of evil to come, can be read in living letters by the eye of the trained observer in the history of many of these half cured cases even when their course and termination may have been perfectly satisfactory to the unsuspecting patient and his friends. How many of our most serious and most obstinate chronic troubles spring directly from the half removed result of some acute attack? How often are the germs of evils which will curse generations yet unborn, left lurking in the system, simply because the subject thinks himself cured and doesn't want to make his bill any larger? Of course much of this too early cessation of treatment is due to a simple aversion to taking any kind of trouble unless spurred on by pain or fear, but would not this tendency be greatly checked by a knowledge on the patient's part that his bill at the end of the year would be just the same whether he took further treatment or not, while other advice or new remedies would be an additional expense; as would be the case under a system of constant attendance.

What influence does our present system of attendance give us over the sanitary surroundings, diet or habits of life of our patients? Almost none. It is true we have the priceless privilege of giving any amount of excellent advice on these subjects, which they may perhaps remember for a week, though usually they regard it simply as customary and harmless prelude to the prescription which they regard as the "value received" for their fee. Such an effect has the proportioning of our remuneration to the number of distinct definite services rendered had upon the ideas of the laity, that many of them have no idea of paying for anything, except some such tangible benefit as a prescription or an operation. In some instances we are actually obliged to give a prescription in order to secure the right (in their minds) to claim a fee. They will pay a dollar for a prescription and get the advice thrown in for nothing, and as the immortal "Josh Billings" has sagely remarked, "what people gets for nothing they are mighty apt to value at about what they gave for it." Over the home life of our patients, we have almost no control or even supervision until after the mischief (which often might have been averted by a few timely precautions) has been done, and even that ceases almost as soon as we began to exercise it. What sort of success would we expect from a nurseryman who was not permitted to prune his trees until they were already misshapen, to destroy their infesting parasites until the foliage was withered, who was not allowed to water them till they began to droop or manure them till they were almost exhausted? And yet this is the relation to the bodies of our patients in which we are practically placed by our present system. The words "cobbler and tinker" are terms of reproach, and yet cobbling and tinkering is about all we are permitted to do to the vital mechanisms of most of our patrons.

When we consider this fact in the light of the deliberate statement of Mr. Chadwick, the distinguished English sanitarian, that he can build a city which shall have any required death-rate from 3 per 1000 up. When we remember that "the white plague of the North," as Holmes aptly calls consumption which is responsible for the lion's share of our death-rate, is more than analogous to the familiar spindling of plants deprived of air and sunlight; that as much as fifty years ago, even a layman like Lord Palmerston declared that "for every death from typhoid somebody ought to hang;" that an unfailing specific for malaria, diphtheria and cholera, is contained in a six inch drain tile, in short that nearly one-half of our existing diseases are absolutely preventable, does not a readjustment of our relation to the public appear urgently necessary? How would a system of constant attendance at a fixed sum per year or month, including an annual or semi-annual sanitary inspection of the residence and surroundings, and review of the diet and habits of life of the family, if practicable, modify the conditions under which we are now attempting to promote the health of the public? I

am well aware that this system at present is generally stigmatized by us as a "quack method" if not a form of quackery itself, but I think even the bad hands into which it has to some extent fallen, should not prevent our candidly recognizing, and, if worthy, appropriating any feature of value which it may possess. Besides, we must remember that the system in part at least, is in practical operation in the different lodges and benefit associations, in manufacturing establishments and mines all over the country, with generally eminently satisfactory results regarded from an economic standpoint. Of course the principle upon which all these plans are adopted is a purely economical one, to get the greatest amount of service for the least possible cost, and they could only be expected to be a success in this direction.

The plan which I would respectfully submit is much wider in its scope, and is briefly as follows: That at the beginning of the calendar year, each individual or family should engage his or their medical attendant for the next twelve months, agreeing to pay him a specified annual salary in advance, either in full or in quarterly or monthly installments. The physician on his part should agree to render any and all professional services required, except operations or manipulations requiring the skill and training of a specialist, for the annual consideration specified, which might readily be fixed according to some rate *per capita* or *per familiam* laid down in the fee bill. The physician should further agree in consideration of the sum specified, to make an annual or semi-annual inspection of the sanitary condition of the house and premises of his client, and to offer such suggestions as he saw fit in regard to the diet or habits of life of himself or his family, in short to act as general adviser on all matters of hygiene or therapeutics. The system might briefly, and perhaps not inaptly, be described as a scheme of "health insurance." What are the advantages which seem to be presented by this plan? In the first place, our patients would have no inducement whatever to delay consulting us, in fact moved by a not unnatural desire to get their money's worth out of us, would probably hasten to do so at the earliest appearance of discomfort or danger, and thus give us full control of the case at that period in which a "stitch" properly taken often saves not "nine," but "ninety and nine." We should have every opportunity to abate or favorably modify the attack, and it needs no word from me to point out to you the well-nigh inestimable value of this vantage ground. Later during the progress of the case there would be not the slightest danger of any objection to the frequency of our visits, on the contrary the difficulty would lie in exactly the opposite direction, and would constitute the principal drawback of the system. In convalescence, we need fear no interruption to those finishing touches which may exercise such a powerful influence upon the future comfort or safety of our patient, and in the giving of which the master hand finds scope for the finest and most highly appreciated subtleties of its skill.

Above all it would give us a fair opportunity for the practice of the grand branch of preventive medicine, a privilege which under the present system is practically denied to us. How is it that until within the last few years in scarce even one of our many and justly famous professional schools and colleges, was there to be found a full Professor of hygiene or a chair of preventive medicine? Why is it that one could almost count upon his five fingers all the really valuable and exhaustive treatises upon this subject by American authors? Where are the Grosses, the Bartholows, the Flints, the Emmets of Hygiene or the Agnews, the Hammonds, the Knapps and the Roosas of Preventive Medicine? The profession of the United States has yet to produce the man who has won a national reputation solely by his work or writings in this department. One reason at least for this state of affairs is not far to seek; the field for work in this direction has been either so exceedingly limited or so barren and difficult of cultivation as to almost deprive us of any inducement to develop it. Skill and proficiency in any other branch of our art are highly appreciated and well remunerated, but in this one they are regarded with the utmost indifference. As medical students we are required to practically acquaint ourselves with, say seven branches in a comparatively short space of time, knowing that the public are quite willing to pay us for proficiency in six branches out of the seven, but will hardly even accept our advice gratis in the seventh, and the result is well-nigh inevitable. How can we expect it to be otherwise when the student has absolutely no prospect of a fair remuneration for the time and labor expended in obtaining a thorough knowledge of this branch, unless he chooses to enter the uncertain arena of politics as a candidate for the often poorly paid and unpopular position of a health officer? In spite of this utter lack of pecuniary or even honorary inducement, in the face of sneers at his "pretended" zeal, to his everlasting credit be it spoken, the American physician is today the truest promoter of the health of the people, the most earnest, and I had almost said, the only persistent advocate of sanitary measures; but would not the "health insurance" system if generally adopted give a new dignity to his labors and immensely increase the scope of his energies?

Would not this system also do much to break up that unfortunate mental habit impressed upon us from earliest infancy which involuntarily connects the doctor with discomfort and bitter medicine, if not with the undertaker and the sexton? A habit whose influence upon the popularity of the profession, though slight, is sometimes unpleasantly appreciable. It would also tend to lessen the present unfortunately too common tendency to select professional advisers on the spur of the moment or dismiss them from some momentary impulse of dissatisfaction, a course highly prejudicial to the interests of both parties. Most men give less careful, deliberate consideration to the choice or dismissal of their family physician than they would to the consummation of a horse-trade. The financial advantages of the scheme in rendering our incomes, not only more definite, but also more certain, are obvious, and the few figures bearing upon the subject which I have been able to collect, which I dare hardly dignify by the name of statistics, render it at least highly probable, that a rate *per annum* can

be fixed, which would be both satisfactory to the public and remunerative to us. The agreement would simply be an ordinary common sense business arrangement, legally binding, so that there could be no possible objection on the part of our clients to being reminded of their delinquencies by a collector or any dissatisfaction with the size of the bill. Each "policy holder" would know in advance the exact amount of his "premium" and the date at which it would be due, and could prepare to meet it promptly like any other business obligation, instead of, as now, neither knowing the amount nor the date till after it is due and regarding the obligation as a part of an inscrutable dispensation of Providence, which he will try to meet when he can conveniently spare the money.

Now just a word on the drawbacks of the scheme, though it is probably a subject which might safely be left to those who are to follow me. No doubt the objection which is already uppermost in the minds of most of you is the enormous and unreasonable demands on our time, which would be made by some of our patients under this system. In addition to the insane craving of some persons for constant medical attendance. there will be added the not wholly unnatural desire to "get their money's worth" out of us, but would we not be in some respects, in a better position to meet these demands than at present? In the first place, when entering upon the agreement, we should give our patients to clearly understand that they were engaging us, not to be simply medicine-carriers or visit-makers, but to advise them to the very best of our judgment, and that the question of the necessity of the visit must be left largely to our discretion. Then the tenure of our professional position being so much more secure, we shall be able to treat these unreasonable cases on a much more rational basis. We could safely reason with them, if necessary reprove or scold them, or even occasionally afford to tell them the truth. We might occasionally find ourselves in a position to make use of Abernethy's celebrated prescription given to a gentleman who somewhat pompously introduced himself as "James Peet, of Rock Villa, Clonmel, Waterford, Ireland." It was not committed to writing, but was delivered verbally somewhat as follows: "James Peet, of Rock Villa, Clonmel, Waterford, Ireland, go back to Rock Villa, Clonmel, Waterford, Ireland, and fancy you are well and you will be well." If these means should fail us, there are a hundred and one rusty weapons in our armamentarium such as blisters, nauseous draughts, venesections, or hypodermatic injections of *aqua destillata*, which could be used with deadly effect.

But perhaps the most practical objection would be based on the probable unwillingness of the laity to pay any sum in advance for services which they are not even sure that they are going to need; but even this objection loses some of its force, when we consider the almost innumerable number of lodges, guilds and benefit associations into which not only the educated, but even the most unintelligent classes are forming themselves for just this kind of mutual protection. When we further consider that scarcely fifty years ago, life insurance was regarded as not only absurd and impracticable, but even impious, while now men of every condition are willingly paying from $10 to $1000 a year solely for life insurance, it would scarcely seem improbable that their education up to the point of paying the comparatively trifling sum necessary for "health insurance" would simply be a matter of months or years.

Of course the annual fee would necessarily have an important effect on the weight of this objection. This can only be determined by past experience. Simply as a rough estimate of the probable amount of this fee, I would refer to a few fragmentary statistic which I have been able to collect. These statistics have been taken from four different ledgers, one of which was kept in a country village of about 1200 inhabitants, another in a town of about 6000 inhabitants, and the other two a city of 35,000 population, thus embracing nearly all classes of practice. The results even from so small a number of data are comparatively uniform. The village series comprises only twenty-seven families, or about 130 persons, who spent the exceedingly low sum of $7 per annum for medical attendance. The town statistics, covering nearly 400 families, show an average of about $13.50 per annum, while the city series, embracing 150 families, or nearly 700 persons, show an average expense of over $19.00.[1] From these it would appear to be probable that the average expense per annum, making the necessary allowances for healthfulness of location and habits of life, would approximate very closely to $13 per annum, or a little over $1.00 per month, the actual average from the enclosed figures being $13.60. When we consider the really appreciable preventative influence which we might exercise, I think we would almost be justified in concluding that we could afford to render the proposed services for the present average expense, or perhaps even for less, especially when we remember the greatly increased certainty of our being paid; and when we can represent to our clients that all these invaluable hygienic advantages may be secured in addition to regular attendance, at the cost of the latter, surely a reasonable man need have no hesitation about adopting the system. Surely we could afford to perform the same services under more favorable circumstances for the same sum. The sum proposed very closely approximates to that contributed by miners for similar purposes, the assessments ranging from seventy-five cents a month for a single man, to $1.25 to $1.50 a month for a married man, according to the size of his family. Probably a fair average under our system would be for adults $5.00 and children $1.25 per capita per annum, which would impose almost exactly the average expense per annum on an average family of five members. Taking these scattered figures as an indication, it would hardly appear probable that any serious objection will be raised by the laity on account of expense.

Without doubt the objections to the plan are neither few nor groundless; but are not the advantages proposed to be secured both real and valuable? In fact, it seems to me that the time has already come

[1] These statistics cover an average of about three years.

when an effort must be made to secure them. The crying need of the age is for sound hygienic teaching, and if the profession fail to give it, who can fill their place? I care not what means be adopted to reach the end, but it must be reached, and to provoke a discussion of ways and means is the sole object of these informal suggestions.

Discussion of the paper was opened by DR. ALBERT L. GIHON, U. S. N., who stated that while in Nagasaki, Japan, the system suggested was substantially that pursued in his own private practice, and was found satisfactory both to patient and practitioner. It is indeed the only independent and dignified way in which to practice medicine.

He was followed by Drs. Horatio R. Storer, of Newport, R. I., W. L. Schenck, of Osage City, Kan., Geo. H. Rohé, of Baltimore, Md., Foster, of Portland, Me., Wyman, U. S. Marine Hospital, St. Louis, Hazelwood, of Grand Rapids, Mich., and Tupper, of Michigan, all of whom approved of the plan presented in the main, theoretically, at least; though most of them doubted its practicability at present.

A CASE OF AORTIC ANEURISM TREATED BY THE INSERTION OF WIRE.[1]

BY JOSEPH RANSOHOFF, M.D., F.R.C.S.,

PROFESSOR OF DESCRIPTIVE ANATOMY AND CLINICAL SURGERY, MEDICAL COLLEGE OF OHIO.

The subject of aneurism never fails to arouse the interest of the surgeon. Happily the progress of our art has been such, that he who is thus afflicted needs, as a rule, no longer to consider himself an object of scientific interest solely, but can with at least a fair prospect of successful issue rely upon one or other of the methods recognized as radical in the treatment of his disease. There are cases, however, and notably those of the aorta, which are not amenable to ligation or compression, and in which despite medicinal treatment and the observance of absolute rest a rapidly fatal result must be predicted. Such cases ought not to be forsaken without an effort to save. As our science stands to-day, we are restricted to a choice between distal ligation, galvano-puncture and the introduction of foreign material into the sac of the aneurisms. It is to this latter method only that I beg to direct the attention of my colleagues of the Surgical Section. The cases of aortic aneurism in which it has been adopted are so few that the report of the following case may prove interesting if not instructive:

Case.—Alfred P., æt. 35, colored, presented himself at the Dispensary of the Medical College of Ohio, and was admitted to the Good Samaritan Hospital in May, 1885. Has been a moderate drinker, but has always enjoyed good health. Had a chancroid several years ago, but never had syphilis. In August, 1884, while pulling an oar, he made a very sudden and strenuous effort which was followed by a sharp, stinging pain in the right side of the chest. Pain has been constantly present since. Difficult breathing, more or less severe cough and inability to do hard work have gradually supervened. Slight exertions are often followed by paroxysms of dyspnœa that threaten to terminate life. From February 24 to April 27 the patient was an inmate of the Cincinnati Hospital, where, according to the records, he was kept at rest and upon the iodide of potassium, but without marked benefit.

Status præsens.—Man well-nourished and of good muscular development. Breathing labored, short, and frequently interrupted by spells of coughing whereby a thick tenacious mucus is expelled. A marked œdema of the root of the neck and extending to the right side of the face and the shoulder is observed. Inspection of the chest reveals a conical prominence on the right side of the sternum and extending over the second and third intercostal spaces. The projection is as large as a fist, pulsates perceptibly, but presents no discoloration of the integument. On palpation a pronounced expansile pulsation is felt from below the clavicle to the fourth rib and from the right margin of the sternum to half an inch beyond the mammary line. The tumor is very soft, fluctuating and exceedingly sensitive to pressure. Percussion elicits a dull sound. No thrill can be felt. Auscultation over the tumor reveals no adventitious sounds produced within it. The cardiac sounds are transmitted with more than ordinary clearness, and particularly is the accentuation of the aortic sound noticeable. The position of the apex beat is normal. While the patient is at rest his pulse is 100. According to the sphygmographic tracings taken by the late Dr. Keyt, the pulsation in the radials is synchronous and the pulse-waves agree sufficiently in form. Auscultation over the right lung reveals a harsh inspiratory noise below the lower angle of the scapula. Coarse mucous râles are audible over both lungs.

Diagnosis.—Sacculated aneurism of the ascending aorta, with perforation of the chest wall, unattended by atheroma or cardiac hypertrophy.

Treatment.—When the patient was admitted to the Samaritan Hospital he was placed in bed and kept as much at rest as the cough and dyspnœa would permit. His diet was greatly restricted and 20 grains of the iodide of potassium given three times a day. For a week this treatment, with the administration of an hypodermic injection of morphia at night, was continued with apparent benefit. The pain and dyspnœa were somewhat diminished and the pulse rate reduced to 90 per minute. No perceptible change in the aneurism occurred. The improvement in the condition of the patient was dissipated two weeks after his admission after a severe spell of vomiting which was followed by an increase of pain and dyspnœa, and protracted epistaxis. When the irritability of the stomach had been allayed, the administration of the iodide was resumed, but without marked benefit. During the third and fourth weeks of the patient's stay in the hospital, six subcutaneous injections of ergotine were made in the vicinity of the tumor, with but faint hopes of benefiting him. While no direct detriment to the diseased vessel resulted from

[1] Read in the Section on Surgery at the Thirty-Seventh Annual Meeting of the American Medical Association.

them, they were followed by so much pain that they were discontinued.

It was at this time that Loreta, of Bologna, reported his favorable case of aneurism of the abdominal aorta in which he had given a new and striking impetus to Moore's method of treating aneurisms which from their position are not remediable by ordinary surgical procedures. Recognizing the otherwise hopeless condition of the patient, and after consultation with my colleagues Drs. Whittaker and Nickles, it was determined to insert a coil of wire into the sac in the hope of causing its obliteration by the formation of a firm, organizable clot. The material used was flexible silver wire which had frequently been coiled by passing it into a box of the apparent dimensions of the aneurism.

Operation June 13. A straight hollow needle with thumbscrew attachment was pushed into the aneurism from the right side. The needle was directed parallel to the chest wall, to avoid as far as possible the entrance of a coil into the lumen of the main vessel. Ninety-six inches of the wire were thus introduced into the aneurismal sac without any technical difficulty. The pain experienced was very slight and during the introduction of the first four feet of wire the pulse continued unchanged. It suddenly became almost imperceptible and very rapid. The patient complained of great faintness and it appeared that death was imminent. After the administration of several injections of whiskey, the pulse gained in strength and the remainder of the wire was introduced without further interruption. The end of the coil was pushed into the sac by a secured piece of wire which was withdrawn with the canula. No hæmorrhage attended or followed the operation. An icebag was applied over the aneurism and an opiate administered.

On the day following the operation an amelioration of all the symptoms was noticeable. The œdema of the neck had materially subsided, the pain had diminished and the tumor was decidedly firmer in its outer portion and the pulsation was very much less marked than before the operation. From day to day, for a period of two weeks, the condition of the patient gradually improved. The pulse rarely exceeded 80; was regular and of fair volume. The temperature except on the second day was practically normal. The dyspnœa and cough were no longer distressing and it seemed certain that the organization of a firm clot was in progress. The outer portion of the tumor had become quite firm and fluctuation in it was no longer appreciable. In the last days of June, a change for the worse supervened; a change which coincided with increased pulsations and greater prominence of the internal segment of the tumor. The œdema of the neck, right side of the face and right arm became greater than at any previous period. The right eye was completely closed. The patient now could sleep only on this side. In the hope of consolidating this part of the sac a second operation was performed on the 5th of July, whereby ninety-eight inches of wire were inserted into the sternal portion. Considerable pain, but no distress attended this operation, but the symptoms remained unchanged. The region of the tumor had become quite sensitive within three days after the operation. A distinct induration of the tissues over the tumor was perceptible, and the pulsation appeared less marked. Hopes were still entertained of material improvement when the patient was found dead in bed on the morning of the 12th of July.

Autopsy.—The autopsy was made by Dr. F. Kebler, Pathologist of the Samaritan Hospital. The body is that of a negro, well-nourished and about 35 years of age. Post-mortem rigidity well-marked. The right side of the face, neck, right arm, right side of the trunk and the right lower extremity are markedly œdematous. On the right side of the chest from the clavicle to the nipple is a swelling conical in form, having a base four inches in diameter. To obtain the specimen in its entirety, the right half of the anterior chest wall was removed together with the heart, aorta and trachea. When the necessary incisions were made, the right pleural cavity was found filled with blood, the right lung being compressed.

From the anterior surface of the arch of the aorta springs an aneurismal tumor which has a long diameter of seven and a transverse diameter of four inches. The mouth of the tumor is an inch wide, and circular. Its lower margin is one inch removed from the commencement of the vessel. In the posterior and outer part of the aneurism where it is covered by the mediastinal layer of the pleura is an opening a little larger than a silver dime, where the aneurism had ruptured. When the tumor was opened from behind, there was found in the upper and outer third of the sac a firm laminated clot of considerable thickness and adherent to the sac wall. The walls of the remaining portions of the aneurism were covered with a thin layer of fibrin, the interior being filled with soft coagula of recent formation. Throughout the sac of the aneurism, imbedded in firm and recent clots, are numerous coils of silver wire. One of these rests just above and in close relation to one of the leaflets of the aortic valve. Near the seat of rupture no wire is found. When the clots were removed from the sac, it was found that the second and third ribs were perforated and that the anterior wall of the external cavity was largely made up of the pectoral muscle, which contained about two feet of closely coiled wire. Subsequent dissection of the specimen showed that the aneurism pressed severely upon the right bronchus and right innominate vein. Indeed, the latter could not be completely exposed without endangering the sac wall. The orifices of the large arterial trunks springing from the transverse arch were found pervious, and evidently the circulation in them during life was uninfluenced by the dilatation of the ascending part.

In a case like the one presented, comment should be directed towards the solution of four questions: 1. Was the operation justifiable? 2. To what extent did it imperil the life of the patient? 3. Did it offer any prospects of a radical cure of the aneurism? 4. Do the cases hitherto reported in which this plan has been tried warrant its repetition?

1. It can hardly be questioned, but that in the case before us, medicinal and postural treatment

were fairly tested and found inefficient. The choice remained between galvano-puncture, the introduction of wire and distal deligation. Were the favorable reports of Ciniselli corroborated by others, his method should certainly have been resorted to. According to most recent and weighly authorities, electrolysis fails, as a rule, to be of more than temporary benefit. Of eight cases referred to by Poore, all terminated fatally. Indeed, it is justly questioned whether the method accomplishes more than acupuncture, and in a recent supposed successful case of aneurism of the root of the neck treated by galvano-puncture, it was found that the current was almost *nil*. In the absence of atheromatous changes in the arteries my choice would have been distal deligation. I was deterred from following it because the dyspnœa was so intense and the œdema of the neck so pronounced that there was every probability of death during the operation. The introduction of wire was therefore practised as a last resort.

2. That the life of the patient was imperiled by the operation is certain. The specimen shows that notwithstanding the caution observed in introducing the wire, a loop passed beyond the neck of the sac, entered the aorta and was probably deflected by the semilunar valves. When this occurred, syncope which was all but fatal supervened. I was the less prepared for this mishap, since it had not occurred in the few cases previously recorded; furthermore, according to Bacelli, the absence of cardiac hypertrophy made the existence of a large aperture of communication exceedingly improbable.

Even with a loop of wire in the aorta, embolism, the danger most dreaded, did not occur. In only one of the reported cases, that of Moore, did death result from embolism which possibly originated in an inflammatory state in the heart itself and not in the aneurism.

The supposition that a severe hæmorrhage might ensue upon the prolonged retention of a canula in the sac wall is purely theoretical. Neither in this case nor in those already published was there any bleeding during the operation or immediately after the withdrawal of the needle. In Loreta's case of abdominal aneurism, in that of Levis of the root of the neck, and in my own, death resulted from rupture of the sac. In the case of Levis the rupture occurred on the fourth day. In Loreta's the tumor had consolidated to such an extent as to weaken the main trunk, which gave away at the neck of the sac. In the case presented, this explanation will not suffice, since neither coagula nor loops of wire were found near the seat of rupture. This took place despite the operation, and not in consequence of it.

3. To the extent that physical signs can be construed to indicate the condition of the contents of an aneurism, those of the case presented precluded the existence of organizable coagula before surgical interference was undertaken. The tumor was soft, even fluctuating, pulsating forcibly and rapidly increasing in size. The physical signs after the operation indicated the beginning of an attempt at a radical cure. The induration of the tumor, its decreased pulsation and the simultaneous improvement in the symptoms, justified a belief in the formation of an "active" clot. Post-mortem evidences confirm the belief. The walls of the sac are lined with firm, the interior with firm and loose coagula imbedded within which are the coils of wire. Similar conditions were found in the cases of Moore, Donville, Bryant, Bacelli, Schrötter, Loreta and Cayley. In almost all of them, however, all parts of the aneurism were not alike affected by the treatment, and it is therefore certain that very decided improvements in the technique of the operation, and particularly in the material introduced, must be devised before more than a partial or temporary coagulation shall result. It is not improbable that a less rigid and hence less dangerous material than wire or watch-springs will be determined upon. The firmness of the wire loops prevents unlimited diminution in the size of the sac during the process of contraction and, as was probable in Loreta's case, may lead to rupture near the attachment of the sac to the main vessel. Watch-springs are readily changed chemically by their immersion, and, as happened in Bacelli's cases, are subject to breakage. To overcome these objections, Levis, Bryant and Stimson have inserted horsehair, Murray catgut, and Schrötter, Florence silk. In Murray's case, as was to be expected, the gut was found softened and without coagula about it. Whatever faith we can have of permanently relieving these cases should be centred in horsehair rendered aseptic. It is easily passed through a canula, and in large quantity; it coils readily and is as easily compressed. The report of Loreta's case influenced me in the choice of the material used.

4. To determine the propriety of repeating the operation, at least a brief *resumé* of the literature of the subject is essential. This method of treating aneurisms may be said to have originated with Phillips,[1] who advised the retention of a seton for half an hour. Later, Sir E. Herne[2] introduced heated needles into an iliac aneurism and thereby achieved coagulation. Velpeau, Agnew, Heath, Murray, Buck and many others have since resorted to acupuncture, but without notable success. The last-named author, from his experience in two cases of aortic aneurism, considers the procedure inadmissible. In one of his cases threads of silk, in another suture pins were allowed to remain in the sac for twenty-four hours or more. Laminated clots were not developed.[3] Richet[4] mentions five cases in which acupuncture was tried without good results. The most successful cases in which acupuncture has been resorted to are those of MacEwen[5] of popliteal and ileo-femoral aneurisms respectively. Fine needles were introduced into the tumors and retained for an hour, but were moved from place to place every ten minutes. Here, as in Rizzoli's[6] case of femoral aneurism, compression was used at the same time, and probably played the more important rôle in the production of a thrombus. In both instances digital compression was resorted to

[1] Quoted by P. Vogt. Real. Encyclop., Bd. 1, p. 317, North Amer. Arch., July, 1786.
[2] Philosophical Trans., 1796.
[3] Buck. N Y. Med. Rec., vi, p. 140.
[4] Richet. Holmes's Syst. of Surg., Eng. Ed., iii, p. 514.
[5] MacEwen. Lancet, 1877, ii, 536.
[6] Refer. Handb., vol. i, p. 213.

after the withdrawal of the needles. Murray,[7] in a case of subclavian aneurism, by repeated trials of complete transfixion with long needles achieved partial consolidation.

The first case of the permanent introduction of a foreign body into an aneurism was that reported by Mr. Moore,[8] of the Middlesex Hospital, in 1864. The case selected was one of large thoracic aneurism which was on the point of bursting both into the pericardium and through the skin. Twenty-six yards of fine iron wire were inserted through a fine canula, the point of which was moved about during the operation. Rapid coagulation and temporary arrest of pulsation followed. The pulse-rate was reduced from 116 to 78. The improvement was transitory. Severe inflammation of the sac and contiguous tissues supervened and the patient died on the fifth day. Pericarditis was presumably the immediate cause of death. Abscesses were found in the kidneys, but it is doubtful whether they were of recent origin.

On May 14, 1872, Wm. Murray,[10] of Newcastle, reported a case to the Medico-Chirurgical Society in which a man lived for three weeks with twenty-one feet of wire introduced into an aortic aneurism.

On March 23, 1871, Dr. Domville[9] inserted fourteen inches of fine iron wire into an aortic aneurism that had perforated the chest wall. The tumor became firmer, but continued to increase. On the 9th of April, nine needles, each two and one half inches long, were introduced. Fatal hæmorrhage supervened two weeks later. The foreign substances were found imbedded in a firm clot.

The next cases operated upon were those of Levis, of Philadelphia, Bryant, of London, Bacelli, of Rome, and Stimson, of New York. The case of Levis[11] was one of right subclavian aneurism into which twenty-four feet of horsehair were inserted. The patient succumbed on the fourth day from rupture of the sac.

Mr Bryant's[12] case was one of popliteal aneurism in a man with ulcerative endocarditis and "chronic heart disease." Daily attempts were made with compression which was continued for hours at a time. Epistaxis supervened and the patient was evidently sinking. Twenty feet of horsehair were then introduced into the sac and produced rapid coagulation. Death four days after the operation. The horsehair was found entangled in huge laminated clots.

The cases of Bacelli[13] were all of the aorta, and watch-springs were used. The first patient was operated upon on March 27, 1873. By April 4 the cough was less severe, the pulsations less marked and the tumor had decreased in size. The patient died on May 26. The autopsy revealed an aneurism of the ascending aorta which contained laminated clots surrounding six fragments of the watch-spring. The internal surfaces of the aneurismal wall were covered with dense fibrinous layers. Bacelli's second case occurred in 1877. On April 23 he introduced three watch-springs of a total length of five feet. The tumor decreased in size and pulsations almost ceased. The patient did well until examined by a considerable number of medical men, when she commenced to fail. She died on May 3. At the autopsy the sac was found filled with clots containing parts of the spiral spring, but the coagula were not adherent to the sac wall. This separation Barcelli attributes to the examination alluded to. This author operated on a third case in the presence of the delegates to the Sanitary Conference at Rome. Through an exploring needle he introduced seven watch-springs, each twenty inches long. Death resulted on the third day, apparently from exhaustion.[14]

Dr. L. A. Stimson[15] introduced fifteen pieces of horsehair each six inches long into an ileo-femoral aneurism with entirely indifferent result. Coagulation did not ensue. A favorable result was subsequently obtained from ligation of the iliac.

On November 9, 1885, Prof. Schrötter,[16] of Vienna, inserted twenty inches of Florence silk into the outer segment of an aortic aneurism that had perforated the chest wall. On the 13th, thirty inches of the same material were pushed into the lower segment of the tumor. The aneurism became firmer and pulsation less marked. It subsequently increased in all its dimensions, while intense œdema developed in its immediate vicinity. The temperature rose rapidly, probably from inflammation of the sac, and death resulted from *œdema pulmonum* on November 28. The extra-thoracic part of the sac was filled with a laminated clot in which was found the Florence silk deposited in spiral coils.

In December, 1885, Loreta,[17] of Bologna, after a careful study of other operative procedures in similar cases, resorted to laparotomy in a case of sacculated abdominal aneurism. The tumor was situated in the epigastrium and left hypochondrium. There was a loud bruit. The pulse was hardly perceptible in the femoral arteries and ceased altogether when the tumor was compressed. Loreta determined if possible to separate the sac from its connections and to close its opening out of the artery by suture or ligature. If this should prove impracticable it was determined to stuff the cavity with wire. At the operation by which an incision was made from the xyphoid cartilage to the umbilicus, the sac was found united to the stomach, omentum, transverse colon and liver. It was impossible to sever these adhesions and therefore to trace the aneurism to its mouth. A little more than two yards of silvered copper wire were then inserted into the tumor through a canula, and the point of puncture was lightly touched with pure carbolic acid. There was no bleeding. The abdominal wound was closed and healed by first intention. By the seventieth day after the operation, the tumor, which had been as large as the head of a new-born child, was reduced to the size of a walnut and was firmly consolidated. The patient left the

[7] Ibid.
[8] Medico-Chirurg. Trans., xlvii, p. 129.
[9] Stimson. Ref. Handb., p. 213, vol.
[10] Brit. Med. Journal, vol. 1872.
[11] Phil. Med. Times, March 28, 1874. According to Agnew, Levis made a second unsuccessful attempt in an iliac aneurism, and Maury met with a bad result in one of the subclavian.
[12] Trans. Pathol. Soc., 1877, p. 103.
[13] Revue critique sur le traitement des Anev. de l'Aorta. Bull. gén. de Therapie, 1878, vol. xcx.
[14] Brit. Med. Jour., June 20, 1885.
[15] Amer. Jour. Med. Sci., lxxx, p. 64.
[16] Deutsch. Arch. f. Klin. Med., vol. 35, p. 139.
[17] Mem. of the Roy. Acad. Bologna, vol. 6, sec. iv.; Brit. Med. Jour., 1885.

hospital cured. On the ninety-second day, however, he died of rupture of the aorta below the sac. This was filled with consolidated fibrinous clots. Loreta attributes the rupture to an ischæmia of the aortic tunics due to compression and to changes going on in the interior of the sac.

The last case published is that of W. Cayley,[18] reported to the Royal Medical and Chirurgical Society, February 23, 1886. The patient was a man aged 48, with a pulsating tumor, rising about three inches into the neck behind the right sterno-clavicular articulation. The patient was unsuccessfully treated according to Tufnell's method, and given large doses of iodide of potassium. The tumor increased in size and it was evident that it must either soon burst externally or extravasate among the tissues of the neck. On June 24, Mr. Hulke introduced forty feet of steel wire. This caused no constitutional disturbance or local pain, and this portion of the aneurism became completely consolidated. Towards the middle of August, signs of the extension of the intra-thoracic portion of the tumor became more marked and there was an increase of pulsation behind the sternum and towards the left sterno-clavicular articulation. To anticipate fatal pressure on the trachea, Mr. Gould, in the absence of Mr. Hulke, introduced a canula just above the left sterno-clavicular joint, directing the instrument obliquely towards the middle line, and inserted thirty-four feet nine inches of wire. No constitutional disturbance followed, but no relief was given to the symptoms. The patient died in a paroxysm of dyspnœa on September 19. On post-mortem examination, a large aneurism was found springing from the ascending aorta and communicating with the vessel by a very large orifice; the whole of the upper portion was completely filled by a clot, imbedded in which was the wire. The lower portion of the sac caused compression and flattening of the trachea, just above its bifurcation. The first operation produced the desired result in preventing the imminent rupture of the aneurism. The size and connections of the sac rendered the second operation ineffectual.

In the discussion of this case Dr. J. Liston Paul[19] reported a case of innominate aneurism under his care in 1874 which had been treated according to this method. The tumor bulged forward on the left side of the sternum. Into this fifteen feet of cleansed white horsehair were introduced. Slight pain and prickling over the tumor followed. In three days the tumor had grown larger and gave greater distress; on the fourth day the patient died in a convulsion. No search for emboli was made.

It is not remarkable that with such a record of failures the method under consideration has been pronounced "utterly useless" by so competent an authority as the late Dr. Gross, and that Agnew condemns it as "a rash if not criminal trifling with human life." The fourteen cases in which it has been tried terminated fatally, with the exception of Stimson's case in which the result was entirely negative. Still, analysis of the record tends to show that the criticisms just quoted are undeservedly severe and that there are ample reasons for repeating the operation in suitable cases. In the first place, death has in no instance ensued during the operation, although after examining the specimen before us, the possibility of such an occurrence must be conceded. Again, considering the gravity of the disease, the insertion of foreign material into an internal aneurism is not particularly hazardous. In the third case of Bacelli, and in those of Moore, Levis and J. Liston Paul, death followed on or before the fifth day after the operation, so that in only 30 per cent. of the cases can death be attributed to the operation itself, while in the remainder it in no way depended upon the procedure.

In conclusion, the post-mortem reports that are available show that coagulation almost invariably took place in the sac, and when sufficient time elapsed before death, the clot was found laminated and often adherent to the sac wall. In some of these cases at least, progress was made towards a cure. The aneurismal wall was strengthened, the tumor as a rule decreased in size, life was made comfortable and even prolonged. This, I think, was accomplished in the first case of Bacelli, in those of Loreta and of Cayley and probably in the one above reported. In all these cases death was imminent from compression of vital structures or from threatened rupture of the sac. Life was sustained for periods varying from three weeks to three months from the date of the operation. In view of these facts and notwithstanding the failure of the method in effecting a cure, it appears to me that the practice is worthy of further trial. Of course, it should rarely if ever be resorted to in aneurisms of peripheral vessels, when so many safer methods are at our command. Nor is it admissible in intra-thoracic and abdominal aneurisms until all ordinary therapeutic measures have been fairly tried. Practised as a last resort in such cases, it has undoubtedly lengthened life, and it is far from improbable that, if often adopted, a permanent recovery will occasionally be obtained in cases that are hopeless without it.

DR. HERRICK, of Cleveland, asked the cause of aneurisms and whether we were justified in treating such cases on purely empirical grounds?

DR. RANSOHOFF, in answer, stated that the aneurism was traumatic in origin, that atheromatous degeneration would preclude such treatment, and that it was used only as a *dernier réssort;* but that the treatment was rational and not simply empirical.

[18] Brit. Med. Jour., Feb. 27, 1886.
[19] Ibid.

AN OBSCURE CASE OF EXOPHTHALMOS.[1]

BY J. H. THOMPSON, M.D.,

OF KANSAS CITY, MO.

In presenting this report of a case to the Section, I beg to apologize for its apparent insignificance, but inasmuch as I am at a loss to account for an extremely interesting condition, I am prompted to ac-

[1] Read in the Section of Ophthalmology, Otology and Laryngology, at the Thirty-seventh Annual Meeting of the American Medical Association.

quaint you with it, that I may secure information which will aid me in the future.

A little boy 5 years old received a slight cut across the face from a whip in the hands of a playmate. The eye was not injured. The only manifest result was a slight scratch on the bridge of the nose. From all accounts he was not sufficiently hurt to cry, and did not complain afterwards. I may here state that there was mumps in the neighborhood, but at this time the child was in perfect health, and as far as I could learn, had never suffered from any serious complaint. Some two weeks after the receipt of the injury, and after all traces of the blow were off the face, he began to complain, at night, of pain in his head. It was paroxysmal, for he would start up from a sound sleep, cry a moment, say that the side of his head and eye hurt him, and as quickly fall asleep again. This would happen three or four times during the night. At other times there were no indications of trouble. These attacks came on during several nights, when the family physician was consulted.

At first, after a careful examination he could find no cause for the pain, but afterwards he thought he could see that the right eye protruded, and he called me in consultation. When I saw the child he had a well-marked exophthalmos of the right side. That was all I could discern. The eye projected about one-half inch forwards, but not so far that the lids could not be closed. It was forced outwards in the axis of the orbit; was slightly movable in all directions, but could not be pushed back into the socket by moderate pressure. There was no swelling of the lids, nor any congestion or œdema of the conjunctiva. In fine, the external eye and its surroundings were normal. I searched carefully for evidences of periostitis and cellulitis, but found none. The internal eye, other than a slight clouding of the disc, perhaps some swelling, and an enlargement of the veins, was normal. Vision was good.

Inasmuch as I could not find a cause for the exophthalmos I called in consultation one of the leading surgeons of Kansas City. Again we examined carefully for retro-bulbar trouble, but in vain. Under an anæsthetic the orbit was explored both with the finger and the hypodermic needle. A small drop of serum was the result; certainly not more or different in kind than could be drawn from any tissue similar to that behind the eye. Under ether we attempted to replace the eye, but could not. It seemed as if the orbit was filled with some hard substance.

We could not make a diagnosis, nor could either of us suggest a line of treatment. However, the patient was placed upon tartar emetic and saline cathartics, with the hope that if there was a serous effusion absorption might take place. After three days' trial, the medicine did no good, but made the patient utterly miserable. The eye remained the same, if not a little worse as far as the displacement was concerned. On my own responsibility I withdrew all internal medication, prescribed a simple belladonna and white precipitate ointment for the forehead, tied a silk handkerchief over the deformed parts, and turned the child out to play with his companions. In one week he was well, the eye returned to its normal position. I afterwards examined it with an ophthalmoscope, but could not find that it had been damaged in the least. During all the time there was no quickening of the pulse, and no elevation of temperature.

THE BEST SUBSTITUTE FOR MOTHER'S MILK.[1]

BY SELDEN B. SPERRY, M.D.,

OF DELAFIELD, WISCONSIN.

If it were not for the immense importance of this subject I should feel like apologizing to this learned body for presenting a paper upon a subject so thoroughly written upon by learned practitioners and specialists of this and other countries. Yet on the other hand, we have but to glance at the innumerable preparations as recommended by physicians, and the overwhelming number of proprietary articles, to realize that the substitute for mother's milk has not been found. It then becomes the duty of the general practitioner to add his experience to that of the specialist, that his position may be strengthened. This I say because this paper presents nothing original, yet having given the subject some attention, I would add my experience to the general stock, as I feel it very desirable that we reach some conclusions on the all-important subject.

Having found, as I think, a substitute which is all that can be desired in the way of an artificial food, I purpose in this paper, in a very brief manner, to discuss its preparation and some of the reasons of failure in its use. I take it for granted that all present, like myself, believe that as a basis for an infant food cow's milk is the proper and by all means the best substitute for the mother's. It seems hardly necessary to present any arguments in favor of this statement. At the same time, you all know that cow's milk presents some differences in composition to that of human milk, and for that reason has been rejected after a short trial when found to disagree, without properly inquiring into the means of overcoming these obstacles.

What are these differences? Cow's milk contains more caseine and less sugar than human milk, and is slightly *acid*, while human milk is slightly *alkaline*. If these points of difference can be bridged it is very evident that we will find *the* substitute for mother's milk. And I think it can be done. But how?

First of all, to insure the coöperation of both mother and nurse in our efforts, it will be all-important that we exert the utmost patience in telling the "whys" and "wherefores" of what is done. It is also necessary that the process of preparing the food be as simple as is possible; that the mother and nurse be carefully instructed in the physiology of infant digestion and things pertaining to it; and of the importance of *cleanliness* and *precision* in the preparation and care of infant food.

In the March, 1883, number of the *American Journal of Obstetrics*, I gave a formula for preparing

[1] Read in the Section on Diseases of Women and Children, at the Thirty-Seventh Annual Meeting of the American Medical Association.

milk for infants, which is as follows: On a tablespoonful or more of granulated pearl barley is poured a pint of boiling water, and allowed to boil for five minutes. For infants under three months one-third of a pint of fresh cow's milk and two-thirds of a pint of this barley water are mixed and sweetened with a tablespoon*ful* of *milk sugar*. In this you have a mixture closely resembling mother's milk, and on which infants thrive.

Barley has been found the best substance for diluting the caseine, but in diseased conditions oatmeal water or rice water can be used with advantage. In preparing the barley water the nurse will often use too much barley, or not strain it, and this will be a source of failure, and a common one, too. It will be necessary, when this mixture has failed, to question the nurse closely as to how it was prepared. When the food is prepared for the baby the barley water, *hot*, should be added to milk. This will then obviate the mistake of boiling the milk, which is too often done.

In selecting milk that from ordinary cows is to be preferred to that from blooded stock. As there is a great difference in the richness of cow's milk, and in the difference between country and city milk, it may be in given cases that a dilution of two-thirds may be too great.

When infants grow rapidly and do nicely cream may be added, or the amount of milk increased. Sugar of milk is the proper substance to sweeten the mixture with, for it is not apt to cause fermentation; it is slightly laxative, and when lime-water is used with the mixture to make it alkaline, the sugar of milk makes the lime more soluble, and therefore the more readily goes to form bone tissue.

A good way is to add the sugar of milk to the barley water when made, and put it into a clean bottle. It is best to make only enough for the day. When the barley water and milk have been mixed it remains to see if the mixture is alkaline; if not, to use lime water or soda bicarbonate until it is.

Phosphate of soda has been recommended, but I have never used it. It will be necessary to provide the nurse with litmus paper.

After four years use of this food in a country practice, where I have had every chance to know when it agreed or when disagreed, and how, enables me to urge you to give it a thorough and impartial trial. I have never found it to fail. Sometimes failures result in not correcting dyspepsia when existing, or the results of improper feeding or improper food.

In the majority of cases in which the subject of the infant's food comes to our notice, we are called in to treat the child for some sickness. When an infant has been for a long time fed improperly, and the mucous membrane of bowels and stomach is out of order, the condition needs to be corrected, else the food will fail. It will not be enough to give the proper food and say the child is not sick. Bromides, with soda and chloral, or hyoscyamus, are needed just as much as proper food. Unless this is attended to the nurse will surely give it soothing syrups, and you will fail, and very likely lay it to the mixture. It is necessary to mention this source of failure for the benefit of the younger practitioners.

In conclusion, I will say that my experience with this mixture has been that it is perfect. It can be used when the mother does not furnish sufficient food herself, and the infant does just as well as if it was all her own. It only remains to say that after the age of three months it should be diluted about half for six months, for eight months one-third, and when it is ten or twelve months old it can be given clear milk.

Delafield, April 29, 1886.

A CASE OF VAGINAL HYSTERECTOMY FOR CANCER OF THE UTERUS.

BY ROBERT FUNKHOUSER, A.M., M.D., LL.B.,
OF ST. LOUIS, MO.
PROFESSOR OF TOPOGRAPHICAL ANATOMY AND CLINICAL SURGERY IN BEAUMONT HOSPITAL MEDICAL COLLEGE.

At the present day one of the most difficult operations is the removal of the uterus through the vagina. At first the hope was strong that the dread disease had at last found a cure. As results were heard from, from time to time, the utility of the operation began to be debated. Though it has found much favor with some, it is opposed by others equally as able. The outcome of the controversy, however, will be productive of great good and serve to point out more specifically and definitely the suitable cases for operation. An abundance has been written relative to the local or constitutional origin of cancer. Few doubt the local origin of the epithelial type of this disease. Whatever the causes may be, I am convinced that irritation of the organ, causing inflammation, especially of a chronic character, is a fruitful source; though Tilt says that in the course of thirty years' practice he has only once witnessed the passage of the womb from inflammation to cancer.

I have now a case under treatment which clinically presents every symptom of the commencement of the disease, but microscopically fails to furnish pathological changes characteristic of the disease itself, but so confident am I that malignancy in time will appear, that I would not hesitate to advise some radical treatment, as for instance, amputation of the neck. As A. Reeves Jackson says, when cancer is limited to the cervical mucous lining, it is rarely detected, perhaps never (THE JOURNAL, August 15, 1885). The disease is not discovered until it has passed deeper. We might say of cancer, generally, what applies to that of the cervical mucous lining, that it is not recognized in many cases until it ceases to be a local disease, and has advanced too deep in the tissues for a permanent cure to be effected. There can be no doubt that the microscope fails to indicate the disease in its inception in very many instances. Must we wait, then, until the disease has advanced to such an extent that the microscope can demonstrate the specificness, when the chances of rendering durable aid are greatly lessened? Will not the time come, and that soon, when we shall be able to reach with certainty a diagnosis at an earlier period of this dread disease than the microscope at present offers? Is there not some forerunner before the present pathological change is seen?

The bacillus is offered as the *fons et origo* of disease. A specific microbe is present in a specific disease. In the past year, great advancement has been made in the study of morbid changes, especially in regard to the ptomaines, which, as the result of the action of bacteria of decomposition upon organic matter, bear a close relation with each other. Lately the bacillus has been associated with the giant cell. (THE JOURNAL, May 15, 1886, Whittaker.) May not future investigation demonstrate that the bacillus precedes and is nature's warning of impending evil?

Cancer cells *per se* do not exist, but are designated such when compared with the normal cells of the tissue in which they are found. As the tendency of opinion is toward the local origin of this disease particularly of the epithelial variety, the sooner an operation is performed the greater the likelihood of saving the patient from so terrible a disease. All of the diseased tissue and some of the healthy must be removed. When, indeed, is it certain this has been accomplished? Even though the organ has been removed, immunity does not always crown our efforts. Is not the effort worth making, even though up to the present time the statistics are not as favorable as at first indicated? If Sir J. Y. Simpson removed a cancer by amputation of the neck and the patient was well eighteen years after, why should not a patient who survives the removal of the entire organ for the same disease, do as well? The operation is but comparatively new, and we must not forget the many failures in other operations for the removal of this and other diseases. Is it just and fair to question the accuracy of the diagnosis in cases that have been reported favorably, or to judge the operation by a standard far too critical, even for an old and well tried operation? Before reading Dr. Jackson's paper, referred to above, I was quite enthusiastic about this operation, but since then my ardor has become moderated. No doubt in the cauliflower type, as its extension is circumferential, some of the less radical operations would serve as well.

The history of the case is as follows: Mrs. R. R., mulatto, 29 years of age, married, servant. Her mother, 47 years of age, has uterine hæmorrhages, the cause of which at present unknown, as no examination has been made. Patient menstruated at 13 years of age, when she suffered much pain. As a rule has been regular. Has had leucorrhœa more or less since the first menstruation. Mother of two children. Character of labors, normal. About four months ago had metrorrhagia. For the last ten months the discharge has been offensive, which increased in quantity and offensiveness several weeks before the operation. The examination per speculum revealed a cauliflower excrescence, the extension being circumferential, but more prominent anteriorly. Owing to the excessive growth, which occluded the os, it was impossible to insert a sound. The patient and family were explicitly informed of the character of the disease, particularly the prognosis and treatment. Different operations were explained and statistics given. Without advising this operation or promising any favorable result, the patient was anxious to have it performed.

Assisted by Drs. King, Cole, Laidley, Gehrung, Mulhall, Shaw, and Mr. Buchanan (student of medicine), I removed the uterus July 1st, 1886. Much difficulty was experienced in bringing the patient under the influence of the anæsthetic, Squibb's ether, more than an hour being consumed in its accomplishment. The vagina having been thoroughly syringed out with carbolized hot water, the patient was placed in position. The uterus was dragged down and freed from the vagina all around. A male sound was then introduced into the bladder to indicate the relation of that viscus with the uterus, and thus facilitate the separation of the two from each other, which was done by both the scissors and fingers. The hæmorrhage, though not great, was controlled by the hot douche. The pouch of Douglas was next opened into posteriorly, and upon the fingers of the left hand passed into the wound; the peritoneum anteriorly was opened into by means of a probe, the opening being enlarged by tearing. After clearing the uterus before and behind, I attempted to retroflex it on itself, but was unable to do so on account of its enlargement and firm consistency. Besides, the vagina was not capacious. I succeeded with much difficulty, by aid of the volsella, in pulling down the uterus, when I proceeded to apply two ligatures to each broad ligament. The broad ligament of the right side was transfixed and tied in two portions, with silk ligatures. An additional silver wire was placed around the ligament nearer the uterus. The left broad ligament was tied *en masse* with a silk ligature and further up with a silver wire. The organ was then cut away with serrated scissors, and the bleeding stopped by the hot douche. After the oozing had ceased, the edges of the cut surfaces of the vagina were brought together. I was unable to bring down the stumps of the broad ligaments into the wound. Nor was the peritoneum closed. A glass drainage-tube was inserted and made firm by packing it around with absorbent cotton. The parts were insufflated with iodoform. The uterus measured 5¼ inches long, 3 inches transversely, 2⅛ inches anteroposteriorly, and the excrescence about 3 inches in diameter. Over fifteen hypodermic injections of brandy were administered during the operation, which consumed a little over an hour. The patient was consequently under the anæsthetic over two hours. Throughout the operation it was unnecessary to apply a ligature, with the exception of the ligatures to the broad ligaments, the means adopted to control hæmorrhage being the hot douche. Considerable difficulty was experienced in tying the broad ligaments, as the tissues gave very little in the attempt to draw down the organ. In ligating the left broad ligament I found a cystic condition of the Fallopian tubes, a large hydro-salpinx with a clot of blood situated in the uterine extremity, due to atresia or occlusion of the tube. Very likely the closure of the os externum by the growth had much to do with this condition.

Upon opening the womb, the mucous membrane appeared congested, and a considerable quantity of thick mucous lined the surface. The shock was very profound. Everything was done to bring about a reaction, which was slow in occurring, and was not

fully secured till the morning of the third day. The temperature after the operation was below normal, and gradually rose till the middle of the second day, when it was 99½°, and on the third day reached 100°, remaining so for four days, after which it lowered to the normal. The pulse was very rapid and feeble, for three days varying from 125 to 135. On the sixth day it lowered to 90, and from that time till the thirteenth day gradually fell to 80. At the end of three weeks, as the ligatures had not come away, I attempted to remove them. In doing so, the ligature of the right stump parted near the loop, but subsequently in a few days passed out. Several days after the other wire ligature was taken away. The silk ligatures likewise were removed, as I was afraid should they remain longer they might cause irritation.

I am not favorably impressed with the silver wire ligatures, and in future in operations of a similar character shall use the silk, as they are less likely to produce trouble should they remain behind from some unavoidable accident. At this writing, August 25, the wound has not entirely closed. There is some discharge, but no fœtor. I am afraid of the return of the disease. Should it return, it will very likely make its appearance behind the posterior wall of the bladder, as the tendency of the growth was in that direction. Especial care was taken to remove as much of the tissue as was possible without opening the bladder. On the 22d of July blood was discharged from the small opening and continued for several days. It corresponded to the usual time of menstruation. It occurred again on the 21st of August, a month later. I consider it a vicarious menstruation. Though there was no uterus, the ovaries remained. In the intervals no blood appeared. Since the removal she has been free from pain in the pelvis, though at times suffering considerably from pain in other parts of the body, of a neuralgic character, which I attributed in great measure to cold.

The growth was examined microscopically by Dr. A. Alt, who pronounced it an exquisite sample of cancer of the cauliflower type. He discovered no trace of the disease in the cornua of the organ. Before and since the operation I have prescribed Donovan's and Fowler's solutions.

Frequently in this day of surgical procedure, the medical treatment is too apt to be neglected. It is well recognized that whatever tends to depreciate the vital powers, favors the appearance and progress of this disease. The general condition of the patient should be watched and appropriate medication administered. Not that any specific cure has ever been discovered, but certain remedies in this, as in disease generally, are beneficial, and have a tendency to build up the system as well as counteract the malignant effects of the disease, and assist or increase the power of the tissues for resisting morbid development. Such are arsenic, mercury, iodide of potash, and tonics in general. The progress of the case will be watched and reported.

2650 Olive St., St. Louis, Aug. 26, 1886.

MEDICAL PROGRESS.

Fracture of the Ulna in its Upper Third Combined with Dislocation of the Head of the Radius.—Dr. Hans Doerfler of Nüremberg, in discussing the mechanism of this injury, concludes from the study of nineteen cases, that direct violence alone less frequently occasions it, than combined violence, as exercised by a fall, the proportion being five to eleven. The greater number of cases occurred between the ages of 3 and 15, all others after the 35th year.

The question in what causative relation the two injuries stand to each other, is next considered. Grénier's assertion that the two injuries could not be simultaneously produced by means of any applied violence, is disproved by the author, who experimented upon ten cadavers. After chiseling partly through the ulna, he could easily fracture it, and by continuing the pressure, could occasion luxation of the radius. He therefore believes that both injuries occur simultaneously, but that the fracture is primary and the dislocation of the radius secondary. Further experiments were performed to prove this. Luxation of the radius proved very difficult to effect, but when present, application of further violence entirely failed to fracture the ulna, but produced typical fracture of the radius in its lower third. After partial incision of the ulna, however, direct violence easily effected the desired injury, luxating the capitulum radii forward and outward, if applied from behind and laterally. The post mortem condition of the parts is accurately described in these cases of artificial production of the injury. The fragment of the ulna is not instrumental in causing the dislocation, in the author's opinion, but the radius-head may be displaced either by the continuation of the same direct violence which caused the fracture, or, by indirect violence, as by pressure upon the extended hand. The first of these modes is illustrated when the patient has been kicked, run over, hit by a stick, shot, or has fallen against some hard object; the latter, when he has first fallen against some hard body and subsequently fallen on his extended hand—as when falling down stairs. Luxation of the radius cannot occur if the ulna be fractured below its upper third. These conclusions are drawn from further experiments on the cadaver.

The *symptoms* of the injury are given as follows: Inspection reveals an angle outlined by the contour of the soft parts of the dorsal aspect of the forearm. The elbow-joint shows a well-marked bulging either towards the front, or laterally and anteriorly or posteriorly combined. This prominence, caused by the capitulum radii, moves when pronation and supination are performed. The circumference of the injured joint is increased from 2½ to 4 cm. On the posterior aspect three points can be made out, with the help of which a triangle may be constructed, having as its apex, the point of fracture of the ulna, and, as its base, a line drawn from the olecranon to the capitulum radii. This line passes directly over the external condyle of the humerus in its middle. The injured arm appears shortened to the extent of 1½

cm. The dislocation of the fragments depends upon the direction of the violence; the lower fragment remaining parallel to the radius in all cases, the upper one varying in position. The fore-arm is generally found half flexed, and half pronated. The elbow is frequently much swollen. Crepitation is always present at the point of fracture. Flexion is interfered with, but extension is possible; supination is somewhat impeded. The ulna alone is shortened about 3 cm.

Complications of the injury are some times present and consist in subluxation of the styloid process of the ulna, paralysis of the musculo-spiralis nerve—a frequent source of danger—compound fracture, or injury to the soft tissue, and fractures of the epicondyles or condyles of the humerus, the latter being of very rare occurrence.

The prognosis is quite favorable if the treatment is begun at once, or even within the first six weeks. After the first two months there is less hope of success on account of the capsular degeneration; a new capsule is soon formed wherever the head of the radius remains, so that function may, in a measure, return, if the fragments of the ulna unite. If the latter does not occur, the use of the hand is entirely lost. Arthritis deformans may occur in later years as a result of the injury. The prognosis of paralysis is unfavorable.

As regards treatment, it is of great importance to bear in mind the possibility of an existence of a luxation of the radius in all cases of ulnar fracture. After replacing the capitulum of the radius with the help of extension and direct pressure from below, the arm is to be fixed in a half-supinated position and flexed at an acute angle at the elbow (so as to eliminate the action of the biceps) by means of a water-glass or starch bandage, to be left on for four or six weeks. The position of half-supination is maintained in order to prevent the new-forming callus from again occasioning a displacement.

In old cases where replacement is impossible, resection of the capitulum radii is indicated. Osteopalinclasis of the ulna may become necessary in some cases. Compound fractures are to be antiseptically treated.—*Deut. Zeitschr. f. Chirurg.* Bd. 23. H. 3 and 4.—*Annals of Surgery*, September, 1886.

HOW TO INCREASE THE BODILY WEIGHT.—In a little pamphlet entitled "Brief Practical Directions for Exercising and Using the Developing Apparatus in the Pratt Gymnasium, Amherst College," we find the following:

"Exercise all the muscles moderately for a short time daily. Do not become greatly fatigued. Take a short spray bath, with moderately cool water, two or three times a week. Avoid excessive mental exercise, study, or worry. Do things quietly and moderately, and not with a rush. Lie down and rest, or sleep for half an hour after dinner and supper if possible. Do not study soon after eating. Practice deep breathing and holding the breath, to exercise the diaphragm and stomach. Retire early at night and sleep as long as possible. If sleepless from brain work, eat a few graham crackers before retiring, to draw the excess of blood from the brain to the stomach. Then bathe the head and back of neck with cold water, and if necessary the feet also, and rub them briskly till red and dry. Eat slowly and freely, thoroughly chewing the food. Choose especially the following varieties of food. If any of them causes indigestion take less of that one. Sugars, syrups, and all sweet things. Fats, fat meats and soups. Sweet vegetables of all kinds. Corn-starch, tapioca, and all puddings, cakes, candies, and nuts, tea, coffee, chocolate, and cocoa diluted with much milk and well sweetened. Cream and new milk. Butter, eggs and condiments. All other foods may be indulged in to the extent of the inclination. Chewing gum daily before eating and between meals increases the flow of saliva, and so aids the digestion of fat-making foods. It also indirectly stimulates the secretion of the digestive juices of the stomach."—*N. Y. Medical Journal*, Oct. 16, 1886.

GASEOUS MEDICATION PER RECTUM.—BERGERON says that this therapeutic method is based on the physiological principle established by C. Bernard that the introduction by the rectum of substances, even of toxic nature, is not dangerous so long as elimination by the respiratory passages is not hindered. It has been also observed that a current of carbonic acid gas may be introduced in indefinite quantity into the rectum without giving rise to any ill effects, provided certain precautions be adopted. After having tried the effect of a number of balsamic parasiticides and antiseptics, the author has concluded by giving preference to sulphurous mineral waters. A current of four or five litres of carbonic acid gas traversing from 250 to 500 grammes of sulphurous mineral water (Eaux-Bonnes, Allevard, Saint Honoré, Challes) is introduced by the rectum twice every twenty-four hours. After the employment of these measures for a few days, it has been observed that the cough has been greatly relieved, the expectoration has been profoundly altered in quality and its quantity reduced to a very low ebb, the perspirations have been stopped, the general state has been correspondingly improved, and this not only in incipient phthisis, but also in the confirmed stages of the disease.—*Lancet*, Oct. 2, 1886.

RUPTURE OF THE BLADDER.—The result of suturing the rent in cases of ruptured bladder has not hitherto been successful, but the opinion held by surgeons, that it is the right treatment to pursue in such cases, receives strong confirmation from a case now under the care of SIR WILLIAM MACCORMAC in St. Thomas's Hospital. The patient, a strong, florid, healthy man, aged 33, injured his abdomen by running up against a post, about fifteen hours before he applied for admission. Interrupted silk sutures were used for the bladder, the rent in which was about three inches long, a catheter was tied in, and the abdomen drained by a glass tube. There was a large amount of urine in the peritoneal cavity, which was washed out with a solution of boracic acid. The operation was performed on the 22nd ult. The patient passed urine the following day, when the catheter was removed. The drainage tube was taken out on the 24th, and there has been no fever or other symptom since the operation.—*Lancet*, Oct. 2, 1886.

THE
Journal of the American Medical Association.
PUBLISHED WEEKLY.

THE EDITOR OF THIS JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor.

SUBSCRIPTION PRICE, INCLUDING POSTAGE.

PER ANNUM, IN ADVANCE.....$5.00
SINGLE COPIES.....10 CENTS.

Subscriptions may begin at any time. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made at the risk of the publishers, by forwarding in REGISTERED letters.

Address
JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION,
No. 65 RANDOLPH STREET,
CHICAGO, ILLINOIS.

SATURDAY, OCTOBER 30, 1886.

SOME POINTS IN BRAIN SURGERY.

At the recent annual meeting of the British Medical Association MR. VICTOR HORSLEY read a very interesting and practical paper on "Brain Surgery," in which he handled the subject by describing in detail the treatment of an imaginary case, and illustrated his remarks by photographs and specimens from patients exhibited, and from lower animals which had been made the subjects of experiments. Even in the best courses on operative surgery little or nothing is done in the way of making the student familiar with operations on the brain, and it will therefore be of interest to follow closely, in this place, the matter of Mr. Horsley's paper.

On the day before the operation the head of the patient is shaved, and washed with soft soap, and then ether; after which the position of the lesion is ascertained by careful measurement, and the place marked on the scalp. After this the head is covered with lint, soaked in a 1 to 20 solution of carbolic acid, oil-silk and cotton-wool; by which it is thoroughly carbolized for at least twelve hours before the operation. The usual purgative is then administered, on the evening previous to, and an enema on the morning of, the operation. In anæsthetizing the patient Mr. Horsley advises the use of a quarter of a grain of morphia, hypodermatically, and then chloroform. (It should be remembered that chloroform is more used in England than in this country.) The morphia allows a prolonged operation with a smaller quantity of the anæsthetic; and, as ascertained by Prof. Schäfer and Mr. Horsley, it causes well-marked contraction of the arterioles of the central nervous system; so that an incision into the brain is accompanied by comparatively little oozing if the patient be under its influence. The author remarks that he has not used ether because he feared cerebral excitement from its use, while chloroform causes cerebral depression; but he states that in case of heart complications ether would be used. He thinks that in case of considerable heart trouble cocaine might be used as the anæsthetic; and if so, a very strong solution should be used when the dura mater is reached, as this membrane is very sensitive. As asepsis is the one cardinal point on which success of brain surgery depends, any solution applied to the dura must of course be thoroughly aseptic. Mr. Horsley thinks that in treating the wound the strictest Listerian precautions should be used: the spray, 1 to 20 carbolic solution, and for the first few days at least dressings of carbolic gauze. Sublimate gauze, the skin being protected by carbolic gauze, may be more serviceable; but good carbolic gauze is elastic enough.

He condemns the usually advised cruciform incision as inconvenient, for it is necessary to hold back four flaps; a semilunar flap simply has to be thrown back, and is not again in the way. It is important: 1. To carry the incision vertically to the bone and to raise with the flaps all parts superficial to the periosteum. 2. To make a shallow curve, so as to avoid cutting collateral vessels. 3. The incision must be so drawn as not to divide the main arterial trunks supplying that portion of the scalp (which can be easily done so as not to interfere with the first twenty-four hours' drainage of the wound, even if the flap be turned downwards; since, as the patient lies in the supine position, the discharge can always escape from the posterior border). The periosteum should be reflected by a crucial incision from an area corresponding to the first trephine hole, and subsequently as more bone is cut away. In removing the bone "one of the safest and most rapid plans is to make a couple of trephine holes at the opposite extremities of the area to be removed, then to cut half the sides of such an area with a Hey's saw, and finally to complete the division with a powerful bone-forceps. Assuming that the dura mater has been, by means of the trephine-holes, separated as far as possible from the under surface of the bone to be removed, I should have premised that, as no doubt will usually be the case where exploration has to be made, the opening of the skull will have been commenced by the removal of a large disc with the trephine." He prefers a trephine of two inches in diameter. When it is possible to preserve the dura mater intact the removed portions of bone should be kept in aseptic sponges, and placed between

the skin and dura mater at the end of the operation, they having been previously divided into small fragments in the manner indicated by McEwen. "The dura mater should be incised round four-fifths of the circumference of the area exposed at ⅛ inch distance from the edge of the bone, so as to render it possible to stitch the edges together afterwards. The dura mater is best opened first by incision with the scalpel, and then by blunt-pointed curved scissors, great care being taken not to wound the meninges beneath. The main branches of the middle meningeal artery are best secured by a ligature passed through the dura mater just outside its cut edge, and knotted before the vessel is divided.

We now come to the treatment of the brain. The first practical point to notice after division of the dura, says Mr. Horsley, is whether the brain immediately bulges into the trephine hole or not. "I am inclined to believe that the fact of the brain bulging very prominently into the wound indicates pathological intra-cranial tension—a piece of evidence which, if true, is obviously of the highest importance, since, other things being equal, it will indicate the existence of a tumor. I have never, in experiments on healthy animals, observed such immediate bulging, and, conversely, it has never been absent in the three cases of tumor. Should no abnormality be found in the membranes, the color of the brain should be carefully noted. Of course in order to judge as to the color one should have experience, and this may be gained by experiments on the lower animals." "The existence of a slight yellowish tinge, or, possibly, the opposite condition, namely lividity, will indicate the existence of a tumor beneath the cortex in the corona radiata. The condition of the vessels and the perivascular lymphatics must next be investigated, and particular notice taken of any yellowish white patches in the walls of the latter, indicating old mischief. An accurate knowledge of the arterial and venous supply of the brain is highly necessary, since, not only for this purpose, but also for the more difficult one of removing portions of the brain, is it of great service to see at once what portions of the brain are actually, or likely to be, deprived of their blood-supply. Alterations in the density of the brain must next be observed; but it must be remembered that cerebral tumors situated beneath the cortex are scarcely to be detected, save by exploratory incision." Now comes the consideration of the removal of a tumor or a portion of brain substance.

Probably the greatest dread of interfering surgically with the brain is the fear of hæmorrhage, which, says Mr. Horsley, is as unreasonable as the taking of aseptic precautions is indispensable. As in the kidney, the arterioles of the brain are directed perpendicularly to surface; and we know that a slight incision of the kidney is followed by free hæmorrhage, which often causes no little alarm, but which ceases if the wound be plugged for a few minutes with a piece of sponge. "We ought to treat the brain in the same way, and thus while being conservative as far as possible, we should obtain in addition a cleanly cut surface most favorable to rapid union." It will be remembered that much of this hæmorrhage may be avoided by the use of morphine. It seems scarcely necessary to say that every main vessel should be left intact, in view of the terminal character of the cerebral vessels. Owing to the fact that the vessels run in the pia mater they can be raised from the brain, and especially from the sulci while a portion of the subjacent brain is removed, and without serious damage to the vessel-wall. In incising the cortex the cut must be made exactly vertical to the surface, and directed into the corona radiata, when necessary, in such a manner as to avoid damage to fibres coming from the portions of the cortex, and surrounding the seat of the operation; which is easily done by remembering the paths taken from the cortex to the internal capsule. With a knowledge of cerebral localization it will be possible to operate without destroying all portions of any particular centre, unless total paralysis of a part be preferable to leaving diseased tissue which would keep up the symptoms for which the operation is made. After the removal of a portion of brain the floor of the wound bulges almost to a level with the surrounding cortex, and there is a tendency to hernia cerebri. Hence the value of the large semilunar flap becomes more apparent, as it more readily unites by first intention, and it is strong enough to resist the upward push of the brain; which is not the case with the cruciform incision.

In regard to closure of the wound Mr. Horsley says: "I suppose that at the present time I shall be accused of insanity if I propose to lay down the dictum that, as a rule, wound cavities produced by removal of portions of the brain are not to be drained for more than twenty-four hours; but it is, nevertheless, my intention to make such a proposition. Let us consider for a moment the conditions of the problem. We wish to obtain union by first intention—that is, firm union in four or five days. We also wish to secure pressure on the brain, which, as just mentioned, is tending to extrude; and, finally, we wish to arrange matters so that, when the wound is finally healed, the flap of skin may be separated

from the brain beneath by a cushion of soft normal (that is, non-inflammatory) connective tissue. All these latter conditions are to be obtained by allowing a certain amount of tension of wound-exudation within the cavity. During the first twenty-four hours, there is a steady oozing of blood and serous fluid from the cut surfaces. This is best removed; and therefore I put in a drainage-tube at the most dependent point of incision (that is, as the patient lies in bed). This tube is to be taken out the next day, and the wound carefully dressed, firm but gentle pressure being made over the centre of the flap. If the wound-exudation that subsequently collects in the cavity accumulates to any appreciable extent, on the third day the patient may complain of some pain and throbbing in the wound, which, when exposed, will be found to be distended in the centre, the periphery being fimly united. Now comes a most difficult point in the treatment—namely, the question whether this tension is to be allowed to proceed, or whether it should be released. By adopting the latter measure, the advantages of the pressure will be lost; so that the point in question is one requiring special attention. The practical feature upon which it is to be decided is the very simple one whether the primary union is in danger of being broken down by the pressure or not. If the former is the case, the pressure can easily be diminished by gently opening up the track of the drainage-tube with a probe, and liberating some of the exudation. The value of the tension in reducing the tendency to hernial protrusion is obvious; but I wish to draw attention to the fact that, until it is finally absorbed, the heightened pressure serves two purposes. In the first place, it compels the lymphatics of the brain meninges to absorb the fluid, just as the peritoneal vessels do after ovariotomy, so admitting of rapid union of the whole skin-wound; and, in the second place, it acts as a kind of scaffold for the building up of normal connective tissue in the part. This latter point is very obvious in the lower animals, in which, if we reopen the wound at the end of a few days, the cavity is always found filled with a delicate, spongy, pink connective tissue, the meshes of which contain the above mentioned wound-exudation. It is this connective tissue which is to form an elastic barrier between the scalp and the brain. As a general rule, it will never be necessary to do more than relieve the tension in the wound once. At the end of a week or five days, the wound may be lightly covered with a little powdered boracic acid, cotton-wool, and collodion; and the stitches may be removed at any time after the first week. It will always be found that the scalp tends to fall in a little at the seat of operation; but, if the foregoing directions have been faithfully followed out, the hollowing will be slight. It may be considered as a point of practical importance whether a patient will not run considerable risk in pursuing his avocations with a large gap or gaps in the skull. As a matter of fact, this is of little account, as evidenced by experience."

In case a second operation be necessary it will be found that the cicatricial tissues referred to above will be more vascular than the normal tissues, and the dura mater will be slightly adherent to the surface of the brain close to the cut margin on the dura mater. Old cicatrices in the substance of the cortex, above all those which have healed by suppuration, filling up cavities caused by loss of substance, frequently displace large vessels and give passage to large veins.

Mr. Horsley reported three cases of operation on the brain for epilepsy, in which the patients recovered. In one case a tumor was removed, and as the brain substance all around it appeared dusky and rather livid he removed all the part apparently diseased. Microscopic examination showed that the tumor was of tuberculous origin. Since Mr. Horsley's paper was read he has operated on another case of tumor of the brain. The patient was a man who had been absolutely hemiplegic for a month, and had passed into a semi-comatose condition; and before the development of these symptoms he had suffered from fits and a terrible pain in the head. Mr. Horsley trephined over the motor region of the right hemisphere, and removed a tumor weighing four ounces and a half. On the day after the operation the patient was perfectly rational, and free from pain. On the fourth day the wound was entirely healed. The successful outcome of these four operations gives all the more value to his admirable paper, which may be found, with an able discussion, in the *British Medical Journal*, of October 9, 1886.

SHOULD PHYSICIANS PRESCRIBE OFFICINAL MEDICINES ONLY?

The following resolution adopted by the American Pharmaceutical Association at its last annual meeting is worthy of more than a passing notice:

"*Resolved*, That this Association solicit the aid and coöperation of the American Medical Association, in promoting the prescribing by physicians of officinal medicines only, or such preparations as have published formulæ, in preference to others; and that the sev-

eral State Pharmaceutical Associations make similar requests of their respective State Associations."

To what extent members of the profession are in the habit of prescribing unofficinal medicines and preparations, accurate formulæ for the preparation of which are not published in any manner accessible to pharmaceutists generally, we have no mean of knowing. That it prevails to a considerable extent must be inferred from the fact that it has attracted the attention of the American Pharmaceutical Association and is by its members deemed of sufficient importance to require a protest from them. So far as the practice does prevail it is injurious in all its tendencies. If the physician prescribes a medicine of any particular drug-manufacturer's preparation instead of the standard article as given in the Pharmacopœia, he lessens the value of his clinical results for comparison with those obtained by others; and if he prescribes the compounds of this drug-house and that, as "Nichol's Calasaya Iron and Strychnia," or Battle's "Iodia," or the prescription of some eminent physician, as Gross's or Brown-Séquard's anti-neuralgic pills, etc., he not only renders his results valueless for therapeutic comparison, but he fosters the injurious habit of prescribing compounds without carefully adjusting the relative proportion of each ingredient to the condition of the individual patient, and greatly neglects the study of the therapeutic action and value of every drug he uses. Such prescribing is also unjust to the honest pharmacist or prescription druggist, who is compelled to keep a large assortment of unofficinal and proprietary medicines for the purpose of filling such prescriptions instead of using articles of known strength and purity, perhaps prepared by himself in accordance with the standard of the Pharmacopœia; and on the other hand, it constitutes one of the most efficient means of fostering the whole system of manufacturing proprietary compounds for popular as well as professional use, and their imposition upon credulous invalids, whether imaginary or real, to the aggregate value of millions of dollars annually. It would be a great gain to scientific medicine if every physician in prescribing would direct only remedies of officinally recognized strength and purity, and would state the exact amount of each ingredient.

EXPERT EVIDENCE.

In the case of "Louisville, etc. Railway Co. *vs.* Falvey," Sup. Court Indiana, Cent. L. J., April 2, 1886, the following important ruling was made: The opinion of a physician as to the character and permanency of a personal injury is competent. In examining an expert, counsel may assume the facts to be as he thinks they are, and ask for an opinion on those facts. It is competent for a plaintiff, injured by the negligence of another person, to prove that he obeyed the directions of his physician. One who is injured by the negligence of another is bound to use care to procure surgical aid, and also to prevent the aggravation of the injury, but the degree of care required is only ordinary care. Where a passenger receives an injury in a collision caused by the negligence of the servants of a railroad company, and disease is excited or developed by such injury, the injury may be considered as the proximate cause of the disease. It is proper to instruct the jury that if the result of the injury was to diminish the plaintiff's capacity to earn money, that fact should be taken into consideration in estimating damages. A verdict will be set aside on the ground that the damages are excessive, only in cases where the damages are such as to induce the court to believe that the jury must have acted from partiality, prejudice, or corruption. The declarations of an injured person indicative of present pain are inadmissible.

SOCIETY PROCEEDINGS.

AMERICAN RHINOLOGICAL ASSOCIATION.

Fourth Annual Session, held at the Polytechnic Building, St. Louis, Mo., October 5, 6, and 7, 1886.

TUESDAY, OCTOBER 5.—FIRST DAY.

MORNING SESSION.

The meeting was called to order by PRESIDENT A. DEVILBISS, of Toledo, Ohio.

DR. H. F. HENDRIX, of St. Louis, made the

ADDRESS OF WELCOME.

He congratulated the Association on its healthy and growing condition, and upon the high quality of its membership, that it was not a local organization, but is spread north, east, south and west.

DR. A. DEVILBISS, of Toledo, O., then delivered the

PRESIDENT'S ADDRESS.

It was appropriate, instructive and interesting, and gave much satisfaction. He spoke of the purposes of the meeting; of the splendid progress made by the Association in past years; of the duties of the Rhinologist to the general practitioner and the community in which he lives; of the necessities of medicine; of the treatment of diseases of the nose and throat as compared with the past, and lastly, of the publication of the transactions of the Association.

DR. H. JERARD, of East Lynne, Mo., read a paper on

NECROSIS OF THE NASAL BONES.

The salient points of this paper were that "we have necrosis of nasal bones which is too often attributed wrongly to syphilis, and thereby harm is done to the patient and domestic infelicity produced. Also, that the necrosis is ofttimes *not* the *result* of a diathesis, but the *cause* of the systemtic conditions. Further, that these conditions are produced in non-specific cases by too irritating treatment. Treatment must be preëminently soothing."

Dr. C. H. von Klein, of Dayton, O., did not think that there must be a specific disease in order to have diseased bone in the nose, and related cases to show that such was not the case. He recommended iodide of potassium as the constitutional treatment, and operative treatment locally.

Dr. Thos. F. Rumbold, of St. Louis, Mo., had seen a case where he thought the necrosis was due to the use of pure carbolic acid. Treated antiseptically the case recovered.

Dr. R. S. Knode, of Fort Wayne, Ind., had never yet seen a case cured permanently.

Dr. P. W. Logan, of Knoxville, Tenn., read a paper on

A MIXED FORM OF ATROPHIC AND HYPERTROPHIC CATARRHAL INFLAMMATION (HERETOFORE UNDESCRIBED), AND ITS TREATMENT.

He said there exists in mixed forms of atrophic and hypertrophic catarrhal inflammation of the upper air passages hypertrophy and atrophy of the mucous membrane of the nose, nose and pharynx, or nose, pharynx and larynx. He had observed numerous cases of the form of inflammation, some of which were apparently so slightly affected that some observers would, on examination, conclude that the affected structures were in a healthy condition. In other words, this mixed form of trouble does not present the usual characteristics of either the hypertrophic atrophic variety of catarrhal inflammation. In the mixed form of trouble he has usually found especially the atrophic element predominating in adults and in children, generally the hypertrophic element greatest, yet in both adults and children treatment adapted to atrophic inflammation is, he is sure, the correct treatment for the mixed form of catarrhal inflammation. Another valuable point made was that our treatment therefore must be directed to the relief of the atrophic condition always when atrophy exists, regardless of any hypertrophy which may be present.

Dr. Thomas F. Rumbold, of St. Louis, thought that the treatment of the mixed form should be milder than in either case. The subject was further discussed by Drs. von Klein, Jerard, Van Allen and Logan.

Dr. O. F. Brown, of Lexington, Ky., read a paper on

CHROMIC ACID AND TRI-CHLORO-ACETIC ACID IN THE TREATMENT OF HYPERTROPHIES OF PHARYNGO-NASAL CAVITIES.

Dr. C. H. von Klein had made use of this treatment with success. If diluted and mixed with iodoform it acts much more satisfactorily. He used one-quarter glycerine and three-quarters acid with about three to four per cent. of iodoform.

Dr. A. De Vilbiss did not believe it safe to use chromic acid.

Dr. O. F. Brown said that if applied in small quantity and an alkali applied immediately afterwards there would be no evil effects.

Dr. R. S. Knode preferred chromic acid.

AFTERNOON SESSION.

Dr. Carl H. von Klein then delivered an address on

RHINOLOGY IN THE PAST AND OF THE FUTURE.

(Which will be published in an early issue.)

Dr. I. W. Fink, of Hillsboro, Ill., read a paper entitled

THOUGHTS RELATING TO THE NASO-PHARYNGEAL TRACTS.

The writer held that the study of medicine as it is to-day is too much for one man to master. The naso-pharyngeal passage alone is a very important field of mucous membrane, and involves special organs of sense, olfaction, vision, hearing, and intellectual conception.

It is necessary to know what normal health is, in order to know what the opposite condition might be. In rhinological study of disease it is essential to know a healthy mucous membrane from a diseased one, and therefore it requires the most strict observation by the student of medicine to discriminate the two conditions of mucous membrane; a healthy from a diseased one; as well, also, the degree of inflammation present, in order that the treatment may be properly directed. Rhinological practice has a more important place than either the eye or ear.

The study of the sequences resulting from the diseased condition of the mucous membrane under consideration, is awakening a lively interest in the general practice of medicine, and has a first importance in the treatment of disease liable to arise from an unhealthy condition from the source we refer, "naso-pharyngeal membrane."

Dr. J. R. Van Allen, of Kansas City, read a paper on

ASTHMA, ITS CAUSE AND TREATMENT.

He said he was forced to believe colds the most frequent cause, and the nasal and pharyngeal nasal cavities the starting point of a very large proportion of the cases of asthma. He was led to this belief from having found existing in every case a very severe chronic inflammation of the nasal and pharyngo-nasal cavities, and from being able to trace every case he had had to this cause; and also from the marked relief he had been able to afford the cases presented to him by directing his whole treatment to the relief of their chronic catarrhal inflammation. He also described his treatment, and many interesting cases.

The paper was discussed by Drs. Gordon, Van Allen, T. F. Rumbold, De Vilbiss and Knode. The

general opinion being that asthma could not exist without some nasal trouble being present.

WEDNESDAY, OCTOBER 6.—SECOND DAY.

MORNING SESSION.

SCARIFICATIONS IN NASAL HYPERTROPHIES,

by DR. A. G. HOBBS, of Atlanta, Ga., was read by the Secretary.

DR. N. R. GORDON, of Springfield, Ill., stated that terebine would take the place of eucalyptol in every respect.

DR. J. NORTH, of Keokuk, Ia., scarified, and then introduced a piece of slippery elm to keep up the pressure and act as a dressing.

DR. T. F. RUMBOLD, of St. Louis, preferred scarification to the galvano-cautery.

DR. A. DE VILBISS preferred the snare.

DR. H. MARKS, of St. Louis, read a paper giving his methods in the *Treatment of Catarrhal Inflammation of the Nose and Throat, including Diphtheria.*

AFTERNOON SESSION.

DR. H. F. HENDRIX, of St. Louis, read a paper on

COLDS IN VERY EARLY INFANCY.

He claimed that the principal cause of cold-taking by infants was a sudden change from a warm to a cold atmosphere. The infant is bathed by a careless nurse and allowed to take cold, which often runs into nasal catarrh or rhinitis. His most important preventative was warm clothes, with a warm room.

DR. J. P. MATTHEWS, of Carlinville, Ill., read a paper entitled

IS HAY FEVER (SO-CALLED) A DISEASE PER SE?

He intended to prove that as in hay fever there was no elevation of temperature, no fever existed, not only the term hay fever was a misnomer, but many of the names given to the affection were also misnomers. It gave synopsis of many writers' opinions on the subject, many of whom, with the essayist, believed that emanation and probably the pollen from plants was the sole cause of the trouble. He regarded the dermatitis produced by poison oak, or poison sumach (rhus toxidendron and rhus venenatre), and the irritation produced upon mucous membranes of the upper air passages by pollen, as analogous; both the result of plant emanation; the one affecting the cutaneous surface, the other the mucous surface. Also, that unlike constitutional affections, it requires no dyscrasia, only a susceptibility to the plant, as predisposing cause, and inasmuch as one member of a family may be susceptible to either the rhus or the pollen of plants (rag-weed—ambrosia elation—most frequently) while another member of the same family is not, hereditary influences have nothing to do with it. If they be analogous, there can be no neurosis, as some authors claim. If there be no neurosis, no heredity, and not necessarily any dyscrasia, it can hardly be regarded as a disease *per se.*

The treatment recommended was possible prevention. The use of a respirator, spraying the parts with vaseline in which is incorporated either cocaine or better, watery extract of opium, with one of Dr. Rumbold's spray producers; change of residence. The first to keep out the offending pollen, the second to protect the parts and soothe them, the last, and most effective, is to move to parts where the offending plant does not grow.

DR. J. R. VAN ALLEN, of Kansas City, thought that those cases where attacks occurred in the spring were the more amenable to treatment.

DR. T. F. RUMBOLD thought that nasal disease always preceded an attack of hay fever (pruritic rhinitis).

DR. MATTHEWS believed that there were cases where there existed no disease of the nasal mucous membrane before the contact of the vegetable emanations.

DR. RUMBOLD stated that it was the experience of persons whom he had consulted that change of location was only beneficial for a few seasons, and then they would have to hunt some new place for relief. It was his opinion that by proper treatment the case could be cured in time without recourse to the harsher methods of using the cautery or acids.

DR. VON KLEIN asked the question as to whether this disease was due to certain localities, atmospheric changes, or to plants.

DR. O. F. BROWN was of the opinion that it was simply a form of catarrh. He thought it to be a disease of the terminal nerve fibres after the mucous membrane was affected.

DR. VON KLEIN stated that he had had a hay fever patient who was only five years old.

DR. A. DE VILBISS had also seen a hay fever patient five or six years old.

DR. P. W. LOGAN stated that as the catarrhal inflammation is relieved the hay fever abates. Such had always been his experience.

DR. MATTHEWS thought he had seen cases in which he could detect no trace of nasal disease. He thought that very often what catarrhal symptoms were present were due to the irritation caused by the pollen of the noxious plant. He had used respirators with good effect in some cases.

THURSDAY, OCTOBER 7.—THIRD DAY.

MORNING SESSION.

DR. N. R. GORDON, of Springfield, Ill., read a paper on the

IMPORTANCE OF EARLY RECOGNITION AND TREAMENT OF NASO-AURAL CATARRH.

He called attention to the fact that most cases of aural catarrh had their beginning in affections of the nasal passages; that many cases of impaired hearing in children were due to the neglect of nasal catarrh, which impairment dates from an attack of cold in the head. He urged the necessity of prompt treatment in all cases of catarrh which involved the ear, as giving the most satisfactory results.

DR. THOS. F. RUMBOLD read a paper on the

TREATMENT OF PRURITIC RHINITIS (HAY FEVER, SUMMER CATARRH, ETC.)

In examining the patient I am careful not to cause the least irritation, either from sneezing, coughing, or from thrusting the nasal speculum up his nostrils. If the patient is fleshy and has a troublesome cough, it is best to allay this by using spray producer No. 1, spraying a half dram of vaseline and from 2 to 5 drops of the following mixture:

R.	Pinis canadensis (Kennedy's).....	grs. iij.
	Glycerinæ (Price's).....	℥ij,
	Acidi carbolici	gr. ss.
	Ol. gaultheriæ.....	gtts. v.
	Aquæ fero.....	℥vj.
	M.	

Care should be taken that the spray-producer be warm both before and after the medicaments are placed in it. Even if the remedy be liquid it should be made warm; the heated spray more readily cleansing the surface, as well as producing a soothing effect on the inflamed mucous membrane. This application will immediately mitigate the irritated condition of the throat, and make gagging less liable. This application should be followed by spraying, with spray-producer No. 4, half a dram of vaseline and about 5 grains of the following mixture:

R.	Vaseline.....	℥j.
	Eucalyptol (Merck's).....	gtts. v.
M.	Cold.	

The same quantity and mixture should be applied with spray-producer No. 5.

In making applications with the last two instruments named, the point of the spray-producer should be placed just below and behind the pendant soft palate, alternately on each side of the uvula. The air pressure should not exceed 5 lbs. to the square inch. After a few treatments, it will be noticed—if the patient is recovering—that he will require a greater pressure, as the secretions become heavier, or more purulent.

The physician must so handle his instruments that he will not cause the patient's throat to contract, thus preventing all application. The tongue depressor should not be placed too far in the mouth, as this is apt to cause retching. If the patient breathes freely and easily, the soft palate will hang pendant and passive; a condition of these parts essential to successful treatment. If the anterior nares are not in too irritable a condition they should be sprayed with vaseline alone, using spray-producer No. 2, and a nasal speculum that will hold the nostrils widely dilated without causing irritation; not even the sensation of sneezing, as this causes more irritation than the vaseline spray can allay.

If the patient comes with his eyes red and suffused with tears, and quite a flow of watery secretion from the nostrils, at once anoint his nose, eyes, eyelids and eyebrows with vaseline. This will almost immediately allay the irritation of these organs, showing the close relationship between the integument and the mucous membrane. At this first visit I prescribe a laxative, tonic and diuretic and 10 grains of quinine, to be taken on going to bed. This completes the first day's treatment, the effect of which is a very material mitigation of all the symptoms, every patient saying voluntarily that he feels greatly improved, and this is repeated several times.

At the second visit the patient will return with his former symptoms, but all of them less severe. Headaches and difficulty in clearing his throat in the morning will be less annoying. His sneezing also will be reduced at least one-half. This course is followed up every day through the season that the patient has his attacks. If the patient has his first attack on the 20th of August and comes for treatment the 1st of September, the treatment may have to be repeated for ten or twelve days. At the end of this time the enlarged turbinated processes will be greatly reduced and the nasal respiration be carried on without difficulty. After this, treatment every other day is all that is required. Upon inquiry it will be found that upon the recovery from former attacks there has been a large muco-purulent secretion from the nasal passages, and that this has been regarded as the harbinger of recovery. But if the treatment has been successful, this discharge will not be seen, showing that local application has prevented the inflammation from reaching such a severe grade that its recovery takes place.

Electricity is a valuable adjuvant in patients who are thin in flesh, and is of little or no benefit and many times an irritant to those who are corpulent. The galvanic current should be employed. The number of cells required depends upon the effect on the patient; that is, the well-known metallic taste in the mouth should be produced, proving that the nerves of these organs are under influence of the agent. An application that does not produce this effect will prove inefficient. I use a large wooden cup containing a sponge connected with the negative pole (cathode); this is applied over the solar plexus. The positive pole (anode) is applied from the seventh cervical vertebra up to the hair. After an application of about one minute, I take the positive pole in one hand and with my wet fingers of the other hand make applications over the bridge of the nose, the eyebrows and cheeks. The whole application should not last longer than three minutes. Patients are very fond of the effect of electricity, which is frequently more beneficial during acute attacks than after recovery. Quite a number believe the best effect of electricity is experienced three or four hours after its application. I have not applied the galvano-cautery nor chromic acid in any case since last December, and used the Jarvis snare, as modified by myself, in but three out of twenty-eight cases. I have used cocaine in four or five cases. My observation is that its application is always followed by persistent congestion.

I still hold to the views I expressed at the meeting in Lexington, Ky., in 1885, namely: that no patient should be operated upon until it has been found that the treatment by the spray-producer will not have the desired effect.

Atropine solution is far better than cocaine; a 5 per cent. solution is the strength I employ. I apply it by a small piece of cotton.

In reply to a question Dr. Rumbold stated that hay fever was a neurosis from an inflammation.

DR. O. F. BROWN had used chromic acid in every case of hay fever, and had always stopped the sneezing asthma and coughing.

AMENDMENT TO CONSTITUTION.

Amendment to constitution offered last year by Dr. Carl H .von Klein, of Dayton, Ohio, to adopt the constitution of the American Medical Association, was voted on and adopted unanimously.

The following were elected

OFFICERS FOR THE ENSUING YEAR.:

President—J. A. Stuckey, M.D., of Lexington, Ky.

First Vice-President—Carl H. von Klein, M.D., of Dayton, Ohio.

Second Vice-President—Theodore North, M.D., of Keokuk, Iowa.

The Association then adjourned to meet on the last Tuesday in September, 1887, at Dayton, Ohio.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, October 7, 1886.

THE PRESIDENT, B. F. BAER, M.D., IN THE CHAIR.

RUPTURED FALLOPIAN PREGNANCY, LEFT SIDE.

DR. JOS. PRICE exhibited the ovary and distended tube, which had burst spontaneously. No fœtus was discovered; a very free hæmorrhage into the peritoneal cavity had occurred. In the vast majority of cases the rupture is fatal. The cause of death is invariably hæmorrhage.

DR. PRICE also exhibited specimens from a case of

DOUBLE PYO-SALPINX, WITH CYST OF THE RIGHT BROAD LIGAMENT, AND ABSCESS OF THE OVARY OF THE SAME SIDE.

The specimen consisted of both Fallopian tubes and ovaries, and was a good example of pyo-salpinx, both tubes being closed at the ends and distended with pus. The right tube was long and very much distended, and with a large abscess of the ovary and a cyst of the ovary as large as a base-ball, occupied the whole of the right side of the pelvic cavity, where the entire mass was firmly bound down and gave rise to great suffering. The diagnosis in this class of cases is either made or it is not made. Dr. Price is quite sure Mr. Tait, before proceeding to an operation, is fairly certain of his diagnosis, and this generally presents but little difficulty. It is true that he operates early, as soon as he recognizes dangerous trouble. Dr. Price feels certain that delay with us is accountable for the large death-rate. Dr. Mundé says of Mr. Tait: "Now his wonderful dexterity and tactile sense come into play; for with these fingers he at once makes the diagnosis which he appears to pride himself on not attempting to make with accuracy in those cases demanding removal of the uterine appendages, the so-called 'Tait's operation,' except through the abdominal incision."

While at Birmingham, recently, he visited regularly his large public clinic, and watched carefully his rapid examination; he cited one case to illustrate the fact that Mr. Tait made his diagnosis through the vagina. After passing a number of cases, displacements, etc., which he did not think of sufficient importance to ask us to examine, he came to one and kindly asked us to examine and express an opinion. Dr. Price examined and found the physical characteristics of pus. Mr. Tait's reply was "quite right." The patient was at once sent to Spark Hill for operation. One tube was found full of pus, the other partially filled, and the ovaries cystic. This case illustrates that Tait does not guess at conditions and resort to abdominal section for diagnostic purposes. A world of mischief has already come of such statements. Of course there are exceptional cases demanding exploratory incision. Tait says: "Save when the seat of such organic disease as will explain genuine suffering, the uterine appendages ought not to be removed, and that those who attribute all the pelvic ails and aches of women to the ovaries and tubes, and rush in to remove them, are dangerous people."

DR. LONGAKER considered the first case one of tubal pregnancy. Recurring attacks of peritonitis should direct attention to the probability of pyo-salpinx. The condition should be easily recognized, but is sometimes overlooked.

DR. HOWARD A. KELLY remarked that, in view of the increasing number of cases of hæmato-salpinx which we were now meeting, it was of the utmost importance that all those which came under our immediate notice should receive a more rigid examination and elaborate attention should be directed to the clinical history. He believed positive diagnostic signs would be discovered which will make our interference more a matter of scientific certainty. Dr. Kelly was not speaking of those cases of a minor degree of tubal apoplexy or hæmorrhage symptomatic of a grave dyscrasia, but of those in which, owing either to a closure of an outlet or to disease of the mucous membrane of the tubes or grave local circulatory disturbances, a mass collected forming a sausage-like tumor producing various symptoms, some of which are common to pyo-salpinx. There is always great local tenderness and often masses of exudate imbedding and obscuring the original tumor, and in cases of rupture often a peritonitis as rapidly fatal as in pus cases.

The suspicion that a tubal pregnancy lies at the bottom of the explanation in all these cases is negatived by the fact that a majority of the cases are hæmato-salpinx of both tubes.

A very important symptom, which I learn was present in Dr. Price's case, was also prominent in my own case; that is, a stillicidium of bloody grumous material per uterus and vaginum, which is regarded by the patient as a prolonged menstrual period. This undoubtedly flows from the tube, and is altogether analogous to the free purulent discharge from the tubes of pyo-salpinx which he had seen. He intends, in his next case of this kind, to catheterize the tube and dilate and endeavor to relieve his case of hæmato- or pyo-salpinx in this way, if the

discharge exists in sufficient quantity to lead him to suspect a patulous uterine orifice.

Cases of hæmato-salpinx resulting in rupture and death have been reported; one is figured by Winckel.

There are several facts in connection with the life-history of pyo-salpinx which he would like to emphasize. In the first place, he has seen no case which was not the product of a gonorrhœal infection, and while not prepared to deny the possibility of a purulent change in the contents of a hydro-salpinx, for which Bandl contends, these cases, so ably worked up by Dr. Price, and his own observations elsewhere, all point to *gonorrhœa*. Again, *these cases with a history of such acute onset*, constant, agonizing pain, high temperature and often typhoid condition, are the advance stages of a florid gonorrhœa, and are found almost exclusively among the unmarried, and result from contact with a similarly active gonorrhœa in the male. They form a picture utterly different from that developing from the exposure of a wife to the discharges of a husband who has been told that a trifling gleety discharge amounts to nothing, or who has long appeared well, only noticing the discharge after occasional debauches or unusual sexual indulgence. *Here the disease assumes the insidious sneaking type*, commencing with little periodical pains scarcely noticed at first, a slight excess of menstrual flow with more pain after, and so on for months until perhaps an abortion or a pregnancy completed seems to open up channels for a more serious and general infection. I have had typical cases of this in my own practice. It will be often noticeable here that in view of the much greater suffering experienced after the puerperal period, the patient will forget what has gone before and blames her subsequent trouble on the mismanagement of the doctor.

The extreme importance of this whole question, second to none in the whole range of gynæcological investigation, suggests to the mind many pertinent inquiries. What parts of the female genital tract are the favorite seats of the disease? In what order are the structures attacked? May it linger long in one part and then, under some change of condition, attack another part? What is the resisting power of the virus to our various therapeutic agents?

The third question he believes he can answer satisfactorily. In addition to the well known cases in which the disease lingers indefinitely in the urethral tubules and the vulvo-vaginal glands, *he believes that in many of our cases of pyo-salpinx the disease has already lingered for a long time in the uterine mucosa, and has shown itself in the form of a uterine catarrh.* Since formulating this doctrine for himself it has necessarily carried him back to the treatment of many of his cases by topical intra-uterine remedies, a form of treatment which he had some time since abandoned as irrational.

A patient is now coming to his office from whose pelvis he literally quarried out a large stinking tubo-ovarian pus-sac. The left tube and ovary were unaffected, and he left them. She has a free purulent discharge from the uterus, for which the only rational treatment is active local measures.

It is important to recognize the fact that apart from a slight irritation of the outlets of the glands at vulvar orifice, there may be no other signs of gonorrhœal disease than such discharge as issues from the uteri. The vagina may be perfectly sound. Braun and Schwartz lay especial emphasis on the fact that the flat epithelium of the vagina has great powers of resistance against the poison, while delicate epithelial structures, particularly the ciliated, are its favorite resting places.

We will apply our remedies with some success if we bear in mind the fact that the disease does not merely lie on the surface waiting to be wiped off to effect a cure, nor does it merely penetrate the tubular glands, but it invades the interior of the individual cells and attacks the nuclei; it penetrates the strata of connective tissue below, penetrates blood-vessels and lymph spaces and forms thrombi. Relapses then, even after the most energetic treatment, need not surprise us.

We find here, as in many other points, our forefathers did wiser than they knew; their therapeutic resources reached far beyond their knowledge of etiology. No wonder they used the most powerful acids and loved to leave a stick of solid nitrate of silver in the uterus to cure this most obstinate catarrh. If he cannot succeed in catheterizing some of these cases, he knows of no other way in which a perceptible deposit of pus once formed in a tube can be removed but by the radical operation. And let there be no delay here. Cases have been lost simply from the secondary consequences of carrying around this bag of pus in the abdomen. Dr. Veit alone lost two cases from brown atrophy of the heart.

Dr. M. Price remarked that the good results in his brother's operation were due to free irrigation; from three to five gallons of warm water were used to cleanse the peritoneal cavity and to stream through it for ten or fifteen minutes.

Dr. Baer made some remarks upon the value of intra-uterine medication. Although high authorities had denounced it as unnecessary and dangerous, he had continued to use it; he has never given it up as he has always found cases where it was needed, the method has been productive of good results in his hands and he never expects to give it up. It will not cure pyo-salpinx but may prevent it. It will be ludicious to see the ultra-scientific return to intra-uterine medication after the denunciation to which it has been subjected. Dr. Baer prefers the injection of tincture of iodine, carbolic acid, nitric acid, or whatever application may be preferred, say about twenty minims by means of a hard rubber syringe to any of the cotton-wrapped or other form of applicator. No case of inflammation has followed this method of treatment in his hands, and he has less uterine colic than with the applicates, perhaps because less force is required no tenaculum or curette pressure is necessary.

Dr. J. Price in closing the discussion remarked that in the first case there had been a missed period, and two or three weeks later a flow of blood commenced and was continuous for weeks with tenderness of the abdomen. By the microscope only can an exact diagnosis be made between hæmato-salpinx

and tubal pregnancy, and he had had no opportunity to make an accurate one. Rupture may occur early in tubal pregnancy.

An unhealthy condition of the endometrium is very rare. The abortive treatment of gonorrhœa as applied to the male urethra has resulted in orchitis and stricture. The case of pyo-salpinx was operated upon four weeks after an abortion.

DR. DRYSDALE, in view of recent strictures upon intra-uterine medication, would like to mention a case seen by him under Mr. Tait's treatment in 1883. The condition was endometritis, and Mr. Tait etherized the patient, dilated the uterus and applied the Paquelin thermo cautery thoroughly to the endometrium.

(*To be concluded.*)

FOREIGN CORRESPONDENCE

LETTER FROM PARIS.

(FROM OUR OWN CORRESPONDENT.)

Sparteine in Cardiac Affections — Parasitic Mesology in Man — Turpentine in Phosphorus Poisoning — The Galvano-Cautery in Chronic Metritis and Endometritis.

Basing his theory on the results obtained by M. Laborde by experiments on animals with sparteine, Professor Germain Sée has applied this remedy to the treatment of cardiac affections. He employs the sulphate of sparteine in doses of 10 centigrammes on an average in which quantity it augments the intensity and the duration of the ventricular contractions. Professor Sée considers that sparteine is a dynamic agent of the heart, the movements of which it regulates. In this respect it acts like digitalis and the lilly of the valley, but its action is more prompt and more durable. It immediately regulates the cardiac rhythm when this is altered, and has proved itself superior in this case to the other agents. It is indicated in grave, atonic affections, with slackening of the movements of the heart. All these phenomena appear after an hour or more and persist three or four days after the suspension of the medicine. During this period the strength of the patient increases and the respiration is easily performed. The urinary functions do not appear to be affected by the small dose employed. The sulphate of sparteine appears to be useful when the heart is affected in its tissues or when there is insufficiency in its action to overcome the obstacles existing in the circulation. When the pulse is feeble, irregular, arythmic, the sulphate of sparteine reëstablishes the normal state. When the circulation is slackened, the drug overcomes this functional defect in augmenting and in preserving the force acquired by the cardiac muscle.

At the Congress of the Association Française for the advancement of Science, recently held at Nancy, M. Verneuil read a paper on "Parasitic Mesology in Man," in which the author reverted to the question of auto-inoculation in regard to the importance of the influence of the various diatheses. When an individual affected with a certain diatheses receives a wound there occur manifest localizations of this diathesis which M. Verneuil terms traumatic auto-inoculation. For this three conditions are necessary: 1. A microbe. 2. A subject in a state of special receptivity. 3. A wound on certain points of the economy differing according to the nature of the diathesis. So that the rôle of the organ affected is not passive, but becomes, on the contrary, predominant.

Thus, the tubercular bacillus does not develop every where, and the tubercle does not break out indifferently. For instance primary tubercle has never been observed in striated muscles neither in the nipples, nor in the pituitary nor ocular mucous membranes, and yet these are permanently in contact with the bacillus. The observation is still more instructive as regards bones: The compact tissue does not accept tubercle, which on the contrary finds a marvellous soil in the spongy tissue. The articulations also are easily invaded, as well as the serous tissues. The same remark may be applied to syphilis. Indeed a tableau of all the organs and of all the viruses may be formed: A virus that would pollute one organ, would disappear in another. One organ which would favor the development of one microbe would kill another. This fact is well-known to experimenters.

They know for instance that the inoculation of gangrenous septicemia which does not succeed in the blood, progresses on the contrary with terrible rapidity when it is practised in the connective tissue. Luton, in 1880, had already enunciated a similar idea apropos of hypodermic injections but it is of importance to know what the preferred habitats of the different viruses are.

In a paper by Dr. Rondot, of Bordeaux, the author demonstrated, from clinical observations and experiments, the efficacy of "Turpentine in the Treatment of Poisoning by Phosphorus," when taken either immediately or even some hours after the poison has been swallowed. The turpentine and phosphorus combined and are eliminated without causing any other morbid phenomena than a local reaction on the alimentary and urinary organs. It is important to administer the turpentine at the outset, so as to neutralize the greatest quantity possible of the poison. Even if the phosphorus be not completely neutralized, the essential oil of turpentine renders the symptoms milder and favors recovery. Turpentine diminishes hæmorrhage and the nervous symptoms which follow poisoning by phosphorus.

Dr. Apostoli, who devotes himself specially to the female genital organs, read a paper on a "New Treatment of Chronic Metritis and in Particular of Endometritis by the Intra-uterine Application of the Chemical Galvano-Caustic." This treatment which, according to, the author, is simple and inoffensive, and which he terms a veritable therapeutic hysterometry, is nothing else than a mollecular galvano chemical scraping, acid or basic according to the cases, which provokes the formation of a new mucous membrane and constitutes a sort of intra-uterine exutory the action of which may be prolonged and varied at will. Its beneficial effect, which Dr. Apostoli observed in a great number of cases as manifest at the first sittings,

and becomes gradually accentuated and leads to a perfect cure. The patient is not condemned to absolute rest, and the treatment does not require other adjuvants. It has over surgical scraping the advantage of being dosable, localized, to be never instantaneous, and the being able to administer it in divided doses, which accumulate without danger, and at the will of the operator. A. B.

DOMESTIC CORRESPONDENCE

LETTER FROM NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Fifth District Branch Meeting—The Work of District Branch Societies—The Value of Statistics—Milk Supply of Large Cities—Lepto-Meningitis Infantum.

The second annual meeting of the Fifth District Branch of the New York State Medical Association, which includes the city and county of New York, the Hudson River counties as far north as Ulster and Dutchess, and all the counties on Long Island and Staten Island, was held in Brooklyn on the 12th of October. The President, Dr. J. G. Porteous, of Poughkeepsie, in his annual address offered his hearty congratulations on the success not only of this Branch, but of the parent Association, and the other Branches in the State. They had demonstrated, he said, the wisdom of the action taken at Albany on that February morning that all remembered so well; a morning not without its share of doubts and fears, which had long since been brushed aside by the wisdom and moderation of the brave men who led the new departure and stood firm for the faith.

No system of societies had been originated, he went on to say, which so thoroughly covered the ground desired, and so firmly united the members, as this of district branches—not so large as to be unwieldy, but large enough to be interesting and bring a working body of working men in contact with each other, and draw out their views in a characteristic manner; not so small as to foster the petty strife of the old county societies. He had recently seen a statement by one of the Censors of the Medical Association of Alabama, that the county medical societies of that State have a good deal of important work to do, and they do it. Most of the county societies in this State had a good deal of work to do, and did *not* do it.

In perhaps a majority the meetings were annual or semi-annual, the attendance small, and the principal business the all important one of electing officers. For years it had been only a form, and so much had this been felt by the more active members of the profession that in some parts of the State three or more counties would form an independent association, in which very good work was done. He said independent, because the State Society would not recognize them. But the District Branch Associations were still better—better organized, and, with a common head, working more harmoniously and efficiently. In this Branch, as in others that he had visited, the work had been earnest and conscientious. The papers read had been of a character to invite discussion, and while often criticised, always in a kind spirit.

This matter of discussion he believed to be one of the most important in the Association, a really good paper often bringing out many more important points than even the author himself could have anticipated. Such discussion was of the greatest importance to the large body of general practitioners, who compose the main body of the profession, men to whose care the great bulk of the community entrust their many ills; as a rule, a quiet, shrewdly observant, practical class, more willing to be taught than to attempt to teach, men who while often by circumstances precluded from being original investigators in the broadest sense of the term, are still prompt to avail themselves of the advances made in any department of medical science which they can use for the benefit of their patients, and heartily willing to give full credit to any man who adds a tithe of usefulness to the profession.

The work of the whole Association, continued Dr. Porteous, had been carried on in a most conservative and deliberate manner; even the publication of the Transactions had not been in the least degree hurried or premature. The hand of death had made itself felt in their midst, especially in the removal of the honored President of the Branch, Dr. Gault Guernsey, his lamented friend, Dr. Austin Flint, and their distinguished colleague, Dr. Frank H. Hamilton. He would not attempt to eulogize them, as abler pens than his had found it difficult to do justice to their grand and noble characters. Had these most earnest and energetic Founders lived, no doubt they would have added much to the useful work of the Branch.

This consideration brought them face to face with the fact that they should enlist the young men of the profession in their cause, and teach them that there is something greater and more noble in the profession than the mere consideration of dollars and cents. Many of the Fellows were already feeling the weight of advancing years, and would like to know that good and true men were coming forward to take their places.

Dr. Porteous then took up the consideration of the question, What is to be the value of the statistics which are with great labor and considerable expense being collected by the State? Every member of the Association had more or less of this work to do, and he had no doubt that each did it in a conscientious and painstaking manner. But did all those to whom the law intimated this duty do the same? and if not, how could the defect be remedied? He had seen a report of death made out as caused by congestion of the kidneys, without the slightest allusion to the fact that the patient died in childbirth; and further investigation showed that the cause of death reported in the case of this woman's stillborn child was "puerperal convulsions." In another case, where the mother and child were buried in the same coffin, the mother was reported as dying of "heart disease," while no allusion whatever was made to the birth of the child, which was stillborn. No return of the lat-

ter was made until after the burial, and then only at the demand of the Registrar, when the cause of death in the infant was also given as "heart disease." Such reports were certainly misleading and must necessarily seriously impair the value of any statistics compiled from them; while in this class of cases something more than mere ignorance was shown, although this was likely enough to impair their value in many instances.

Dr. Avery Segur, of Brooklyn, who has been abroad during the past summer, gave a most interesting account of his impressions of medicine in England; among the subjects included in his remarks being the history of the Royal College of Physicians, and the Royal College of Surgeons, the study of medicine in England, the qualifications required for licensed practitioners and those entitled to the degree of Doctor or Bachelor of Medicine, the clinical advantages afforded by the great London hospitals, the Gulstonian, Croonian and Lettsonian lectures, and the benefits arising from the thorough organization of the entire profession of Great Britain in the British Medical Association and its Branches.

Dr. H. A. Pooler, of Goshen, Orange County, read a paper on "The Milk Supply of Large Cities, and the Improper Mode in which it is Conducted," in which he made a searching denunciation of the modern Herods who, urged on by the greed of gain, keep up a continual slaughter of the innocents by their iniquitous practices. In speaking of the adulteration of milk by the removal of fat and dilution with water, he quoted as follows from the report of Prof. C. F. Chandler, President of the New York City Board of Health, published in the second annual report of the State Board of Health (1881–2): "While a large proportion of the milk sold has been but moderately watered and skimmed, and is still above the standard of the poorest milk (2½ per cent. of fat), much of the milk has been *extended* and skimmed far below the standard. So openly are these frauds practiced that 'creameries' have been established in many localities, the names of seventy-three such establishments being known to the writer; of which sixty-three are known to send skimmed milk to New York City, all of which is sold as whole milk on its arrival." When such milk as this was further diluted by mothers before they gave it to their infants as a substitute for breast milk, it could be readily seen how greatly the children fed upon it must suffer in consequence.

Up to 1883 there was no law in the State prohibiting the shipping and sale of skimmed milk; but the passage of such a law was then secured, and inspectors were placed on the milk trains. Dr. Pooler told the judiciary committee of the Legislature that if they would pass the law he would guarantee to reduce the mortality among young children in the city of New York at least three thousand; and he was able to keep his promise. In 1879 the mortality in children under five years was 12,777, or about 50 per cent. of the births of that year. This was before the milk adulterations were carried on so extensively as afterwards. In 1880, however, the mortality in this class increased to 14,650; and while from 1878 to 1879 it increased only 300, the increase in the number of deaths from 1879 to 1880 was about 2000. The mortality in 1881 was 17,737, an increase of almost 3000 over 1880, and about 75 per cent. of the births. In 1882 the number of deaths was about the same as in 1881; but if it had not been for the work done in the autumn of 1882, he said, the mortality would have reached nearly 20,000; a close watch being then kept upon the dealers. In the winter of 1882–3 the skimmed milk bill was passed, and notwithstanding many discouraging circumstances, the mortality was reduced from 17,737 in 1881, and 17,520 in 1882, to 13,856, a reduction of some 4000.

But, unfortunately, in 1884 the good work was interfered with; because "politics laid its icy hand of death upon the embryo of a perfect reformation in the milk supply." Up to this time the labor and means employed had been to a large extent voluntary. An appropriation was therefore asked from the Legislature; but while this was granted, a Dairy Commission was also appointed, and this commission was manipulated so as to form a part of the great political "machine." There were other political changes also, and the withdrawal of Prof. Chandler from the head of the Metropolitan Health Department was an irreparable loss. Hence the mortality in children under five years increased from 13,865, in 1883, to 15,272, in 1884, an excess of nearly 2000. Dr. Edson, of New York, and Dr. Bartley, of Brooklyn, however, did all in their power with the limited means at their command, to keep the evil in check. In the mortality statistics quoted by Dr. Pooler he made no reference to the heat or coolness of the summers in the years referred to, and long-continued hot weather is always a most potent factor in the increase of infant mortality in the city of New York. Still, there can be no possible question that any improvement in the quality of the milk supplied to the poorer classes would always be attended with the happiest results in the saving of children's lives.

The latter part of the paper was principally devoted to the evils resulting from the feeding of cows with brewers' grains and distillers' mash, which, he said, were directly injurious to the animals themselves, and, while they stimulated them in such a way that the quantity of milk given was considerably increased, they produced milk of a very inferior quality. The facts showed that the action of this kind of food was to impoverish the milk in its most essential constituent, fat, and largely increase its most objectionable constituent, caseine. When the fat is not equal to the normal amount, the milk forms an exceedingly hard curd in its coagulation, which is known to the skimmed milk cheese-makers as "hickory curd." A number of beautiful micro-photographic illustrations, projected upon a screen by E. W. Martin, Ph.D., chemist to the New York Board of Health, added not a little to the interest and attractiveness of the paper.

An extended discussion followed, and in the course of it Dr. A. N. Bell, Editor of the *Sanitarian*, called attention to the fact that milk from diseased cows sometimes contains a large amount of fat; this being

particularly the case, it is said, with milk from animals suffering from rinderpest. Among the other speakers was Dr. E. R. Squibb, of Brooklyn, who stated, what is undoubtedly a fact, that notwithstanding all the frauds that are practiced upon the community, the milk supplied at present to the cities of New York, Brooklyn, and Jersey City is, as a rule, of a better quality than was formerly the case.

The best paper of the evening was by Dr. Alfred L. Carroll, of New Brighton, Staten Island, the accomplished ex-Secretary of the State Board of Health. His subject was "Lepto-Meningitis Infantum," and the sum of his argument was that a malady quite frequently occurring in childhood, and often erroneously reported as tuburcular meningitis, characterized by serous distension of the ventricles, and variously described under the names of "simple meningitis," "lepto-meningitis," and "acute hydrocephalus," but by most writers ascribed to hyperæmia and inflammation, is, on the contrary, essentially, due to cerebral anæmia; that the principal and most significant morbid factor is a varicosity of the choroid flexures, sometimes extending to those of the fourth ventricle, exerting Moxan's "stop-cock" action, perhaps, in many cases, and thus aggravating the arterial anæmia which gave it birth. Though it is possible that Dr. Carroll may be accused of an unpardonable sin by some of those who swallow German literature whole, for venturing to dispute the pathology of Huguenin, who holds to the inflammatory origin of the trouble, he successfully demonstrated the correctness of his position by the citation of many incontrovertible facts, and especially by the evidence afforded by his own post-mortem researches. His pathological studies have taught him to believe that tubercular meningitis seldom, if ever, occurs except as a part of a more generalized deposit, and that the majority of the cases ascribed to this cause in death certificates, but not verified by necropsy, are really examples of Huguenin's lepto-meningitis. P. B. P.

DEFECTS IN THE PRACTICAL WORKING OF THE SECTIONS OF THE ASSOCIATION.

To the Editor of the Journal:

Dear Sir:—It is painfully evident to every thoughtful physician who attends the meetings of the Sections of the American Medical Association, and then reads the reports published in The Journal of our National Society, that the work done here is *very unsatisfactory*. It is, therefore, highly desirable that physicians who feel an interest in the working of this National Association should take timely heed of this unfortunate condition, which seriously impairs the usefulness of this organization—*if it does not even endanger its existence.*

These introductory sentences are only preliminary to the presentation of the main question, viz.: What is now required to make a better showing for our Sections? In answer to this inquiry, it may be briefly stated *that we should secure better papers, which should be carefully and scientifically discussed, and this discussion fully reported for publication.*

This Journal has already pointed out in its issue of October 2, 1886, page 381, the chief causes which give rise to the production of unsatisfactory papers and their equally unsatisfactory discussion, while the author, in the same article, suggests a practical and efficient remedy for this evil. I cannot, however, agree with him when he asserts that: "To accomplish these results requires no change in the by-laws or organization of the Sections of our Association, but simply a better appreciation of the duties devolving upon the officers of the Sections and those who prepare papers." The fact that the duties required of these officers have not been generally so performed as to yield satisfactory results, should, I think, be accepted as argument in favor of some modification of the by-laws governing their selection, whereby we may secure some additional guarantee for a more efficient performance of their official duties. The new departure adopted at the last meeting of the American Medical Association, by which the nomination of the officers for the Sections is now made in these bodies, *is a modification in the wrong direction.* This system is open to all the objections which can be urged against our political primaries, as they are generally conducted in our large cities. Can it, therefore, be reasonably expected that it will give us efficient officers? Let us demand of our Sections work which will compare favorably with that done in any of the medical organizations of this country! *Let us have good papers, thorough discussions, and full reports for publication in* The Journal. The present system of work in the Sections furnishes only the papers for publication, while the discussions—which are frequently more valuable than the essay—are never fully reported by the Secretaries, and often not at all, and consequently cannot be printed in our Journal.

This omission is so important in all its bearings upon the American Medical Association that it ought to be speedily corrected. *What is the proper remedy?* Is there any system of prodding whereby the Secretaries of the Sections can be prompted to the performance of their duties? The answer to these questions, I think, must be in the negative. Can we do better by the election of a permanent Secretary for each Section—or must we employ a stenographer for this work? It has been suggested to me that those who take part in a discussion should write out their comments, and thus supply these omissions; but this I regard as impracticable. In consideration of this subject it should be remembered that many of these remarks are impromptu, and are often suggested by the previous discussion, rather than by the paper itself. Consequently, it is impracticable for the participants in a discussion to place their views on paper prior to leaving their homes, and during the few days devoted to the meeting of the American Medical Association the time and thoughts of these gentlemen are too much engaged with other matters to reasonably expect them to supply this deficiency. Neither are the conditions for this work more favorable immediately after their return to their homes, where they are apt to find business engagements more pressing on account of their recent absence, and before the convenient time would come for the per-

formance of this work, the comments would have possibly been forgotten by the individual who was expected to write them out. However, a modification of this system has been ound to work very well in some Societies where the Secretary supplies every participant in a discussion with a printed abstract of his remarks, with a request to make corrections and supply deficiencies. Very truly yours,

B. A. WATSON, M.D.

Jersey City, Oct. 23, 1886.

SHORTENING OF BONE IN DESTRUCTION OF SOFT PARTS.

TO THE EDITOR OF THE JOURNAL:

Dear Sir:—Seeing that in these days priority is considered of so much importance, may I be allowed to point out, that though Dr. Martel, of St. Malo, as mentioned in your issue of August 14, (p. 176), may have been the first to conceive the idea of removing a portion of bone in order to facilitate cicatrisation in cases where there is extensive destruction of soft parts, he was not the first to perform or put on record such an operation. It was done in the Royal Infirmary of Edinburgh, in May, 1885, by Mr. Joseph Bell, in the case of a patient, who, during a severe attack of phlegmonous erysipelas, lost the greater part of the skin of the inside of the right arm from the posterior fold of the axilla, down to within three inches of the wrist-joint. He was sent into the Infirmary for amputation, his doctor considering it impossible that such a sore could be healed. Mr. Bell being loth to sacrifice the arm, tried skin-grafting, with the result that cicatrisation progressed till only a wound about 3 inches long by 1 broad, remained on the inside of the elbow-joint. As this refused to heal further, Mr. Bell made up his mind to shorten the arm by removing a portion of the humerus. On May 27, 1885, about eight months before Dr. Martel's operation was performed, the lower three inches of the bone, including the condyles, cartilage and also the olecranon were removed. The result was a complete success, the patient recovering with a useful arm, soundly healed, with full flexion, extension, pronation and supination. The case was recorded in the *Edinburgh Medical Journal* for September, 1885.

I am, yours faithfully,

J. MAXWELL ROSS.

Edinburgh, Sept. 9, 1886.

NAPHTHALINE IN RENAL AFFECTIONS.

TO THE EDITOR OF THE JOURNAL:

Dear Sir:—I noticed in a recent number of the *British Medical Journal*, under the head of Correspondence, the following: "M. de Pezzer treats certain renal affections with naphthaline, especially those that are accompanied with difficult micturition; and, when fetid urine is passed, the results are generally good. In pyelonephritis, M. de Pezzer gives a gramme and a half, also in cystitis and prostatitis, with retention of urine, likewise for stricture complicated by fistula." The above, unfortunately, has been quoted by several of our American journals.

To those who are not familiar with the action of naphthaline on the urinary organs I deem it my duty to say that if employed in the conditions recommended above by M. de Pezzer, even in much smaller doses—5 grains—it quickly excites intense irritation of the urinary passages. I have more than once observed the most violent cystitis excited by 5-grain doses of naphthaline. In one instance two 5-grain doses brought on violent vesical tenesmus, backache and fever, the vesical spasms recurring every fifteen minutes for two days, and the cystitis failed to yield to the ordinary measures for nearly two weeks.

In conditions of perfect health the urinary organs will often tolerate the use of naphthaline in considerable doses when given by the mouth; but I should especially avoid its administration in the conditions named by M. de Pezzer, ample experience having proven to me that in such conditions its action is most pernicious. CHAS. W. PURDY, M.D.

163 State St., Chicago, Oct. 21, 1886.

MISCELLANEOUS.

All membership dues should be sent direct to the Treasurer, RICHARD J. DUNGLISON, M.D., lock box 1274, Philadelphia, Penn.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM OCTOBER 16, 1886, TO OCTOBER 22, 1886.

Capt. Daniel Weisel, Asst. Surgeon, relieved from duty at Ft. Fred Steele, Wyo., and ordered to proceed to and take station at Ft. McKinney, Wyo., reporting to the commanding officer of that post for duty. (S. O. 135, Dept. Platte, Oct. 15, 1886.)

First Lieut. Guy L. Edie, Asst. Surgeon, having returned from detached service in Dept. of Arizona, will join his station at Ft. McIntosh, Texas. (S. O. 144, Dept. Texas, Oct. 13, 1886.)

First Lieut. Alonzo R. Chapin, Asst. Surgeon, relieved from duty at Ft. Laramie, Wyo., and ordered to Ft. Washakie, Wyo. (S. O. 137, Dept. Platte, Oct. 19, 1886.)

First Lieut. Francis J. Ives, Asst. Surgeon, in obedience to instructions received from the division commander, ordered to report in person at hdqrs. Dept. of the Platte, for duty. (S. O. 146, Dept. Texas, Oct. 16, 1886.)

First Lieut. Wm. P. Kendall, leave of absence extended fifteen days. (S. O. 239, A. G. O., Oct. 14, 1886.)

First Lieut. W. B. Banister, Asst. Surgeon, assigned to duty at Ft. Wingate, N. M. (F. O. 97, Dept. Arizona, Sept. 29, 1886.)

First Lieut. Chas. F. Mason, Asst. Surgeon, relieved from temporary duty at Ft. Verde, A. T., and ordered for duty at Ft. Huachnea, A. T. (S. O. 99, Dept. Ariz., Oct. 12, 1886.)

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE FOR THE TWO WEEKS ENDED OCTOBER 23, 1886.

Urquhart, F. M., P. A. Surgeon, relieved from duty at Cape Charles Quarantine, to proceed to Washington, D. C., with Str. "Woodworth." Oct. 20, 1886.

Wasdin, Eugene, P. A. Surgeon, promoted and appointed P. A. Surgeon, from Oct. 1, 1886. Oct. 20, 1886.

Williams, L. L., Asst. Surgeon, granted leave of absence for three days. Oct. 16, 1886.